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ADDRESSES.

ADDRESS ON GENERAL SURGERY.

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It may be positively asserted that more progress has been made in the Science and Art of Medicine during the last fifty years, than in all the centuries which had elapsed since our profession broke loose from the apron strings of the priesthood and escaped the confines of the barber shop. If this may be truly predicated of our profession in general, the branch of Surgery exhibits this progress in a more recognizable degree than the other chief division, or that of the Institutes and Practice of Medicine I use the words recognizable degree in order to expressly disclaim any intention of assuming that we surgeons are any further in advance than our *confrères*. We are mutually dependent, and must move along the same general line. But our work is more apparent, and hence our progress is more recognizable. We are more than mutually dependent bodies—we are, and we should, for our mutual benefit, never forget the fact—one and the same in our essential aims. It is only for the better accomplishment of these essential common aims that we march in separate detachments. Let us ever keep within hailing distance or disaster will surely overtake us.

Let us also remember that our profession in its entirety is both a science and an art, or if we prefer to so express it, an art based on a correlative group of sciences, consisting of Chemistry, Anatomy, Physiology and Pathology. No true progress can be made in either medicine or surgery unless based on facts and principles derived from these sciences. At every step in our advance we must test our position and take our bearings in accordance with their teaching. Modern methods of thought demand this of us, and it is our boast that we, as a class, are fully abreast, if not in the lead, of modern thought in its rigidly scientific methods. The palmy days of brilliant medical theorists have forever past. No great intellect, with vivid imagination and plausible poetic personality, may now fire the enthusiasm of a horde of followers as he spins some beautifully ingenious theory with attenuated threads of intellectual gossamer wrought out from his own "inner consciousness." If a scientist ventures now to launch forth some fondly nurtured "theory," he is evidently half ashamed of himself, and apologetically christens his bantling a "working hypothesis" only. Modern medicine demands facts—thoroughly tested facts—not theories. Yes, thoroughly, scientifically tested facts are what we require for our guidance in the practice of art. First establish the facts, and the law, or generalization, or theory, if you choose, spontaneously crystalizes around these facts. It is in this direction that the intellect of the civilized world now finds its field of intense and unremitting labor; and it is solely to this fact that we owe the marvelous progress characterizing the social evolution of our age. No class is more imbued with this "spirit of the age" than that we represent; for we recognize the principle that it is only in this way we can strengthen our hands and our brains for the better practice of our art in our efforts towards the amelioration of mankind. Hence, our colleges and our hospitals, our chemical, physiological, pathological, and microscopical laboratories; hence, our specialization of different departments of medicine, our local, State and general societies, and last, but not least, our wonderfully enterprising, laborious, painstaking and brilliant periodical literature, unequaled by that of any other profession. What would we do without our medical journals? Without their aid how could I now stand before you and invite your attention to a consideration of some of the "burning subjects" specially occupying the surgical mind since our last meeting in general conclave?

One of these subjects of commanding importance is that of

GENERAL ANÆSTHESIA.

After prolonged and painstaking trials of many volatile agents we may take it as an established fact that two of the earliest introduced—sulphuric ether and chloroform—have excluded all the others from the field; and the practical question is now presented to each graduate in surgery:

Under which of these two banners shall you enter the fight against the pangs and the pains of necessary chirurgical proceedings? He finds the profession more or less distinctly divided on this subject. In a hitherto futile effort to decide the points of difference a vast amount of labor has been expended. Clinical statistics have accumulated to enormous proportions; and experimental researches involving much careful scientific work have been prosecuted. But, notwithstanding all this, the profession has remained divided as to which agent should be used. In order to test the truth of the alleged greater danger from chloroform anæsthesia, a carefully conducted series of experiments were recently instituted in India, under the auspices of a commission appointed by, and at the expense of, the Nizam of Hyderabad, whose enlightened liberality, thus evinced in the cause of scientific medicine, might well be emulated by the authorities of some communities who claim to represent a higher grade of civilization. This commission—under the lead of Surgeon-Major Lawrie, of the British Army—devoted special attention to the assertion that chloroform was the most dangerous agent on account of its greater liability to produce death by sudden heart syncope. The conclusion they reached was, that when chloroform was pushed to a fatal result, it "always arrests the respiration before the heart."

This seems to have proved a perfect bomb-shell in the ranks of the ether-philites. Our Medical "Thunderer," *The Lancet*, would admit no such conclusion. The liberal Nizam of Hyderabad furnished the means for another set of experiments, inviting *The Lancet* to send a representative to join in the labors of the second commission; and the distinguished Dr. T. Lauder Brunton consented to go. The other members of the commission were Surgeon-Major Lawrie, Dr. G. Bumford, and Dr. T. Rustamji Hakim. They worked at the problem for nearly two months, and after sacrificing 70 monkeys and 360 dogs in the noble cause, they reached the same conclusion as the first commission. This conclusion was unanimous; for, be it noted to the honor of Lauder Brunton, he was not ashamed to acknowledge that his former teaching had been entirely erroneous.

To those who have preferred chloroform it will be particularly interesting to observe that the practical deductions drawn from the results of the numerous and varied experiments made by this commission, agree in the main so markedly with the almost universally recognized rules which have been adopted as the result of experience in the use of this agent in surgery—rules the imperative importance of which can be hardly too much emphasized. The following is a very condensed statement of these coincidences between the more important "practical conclusions" of the commission and the accepted rules for the administration of chloroform.

1. The dorsal recumbent position should be adopted throughout, if the operation admits of it, and if not, this position should be immediately resumed as soon as there is "any doubt whatever about the state of the respiration."

2. No pressure should be allowed by tight clothing, holding the patient down, etc., on neck, chest or abdomen, so as to produce the slightest impediment to free respiration.

3. A thorough dilution of the chloroform vapor with air must be secured from the beginning and to the end. Hence, no complicated inhalers need be used, the napkin simply folded into an open cone best insuring this result. I, myself, do not even approve of the little piece of absorbent cotton inside, preferring to pour the chloroform on the side of the inner surface of the cone, and to leave the opening in the top perfectly free.

4. The administration should be very gradual in the beginning. This method is not only more agreeable to the patient, but prevents the struggling and holding of the breath, which are apt to be accompanied or followed by such deep inspirations as to tend to the reception of an over dose. In this respect the manner of producing anæsthesia by chloroform should radically differ from that appropriate when ether is being used. Chloroform should be given largely diluted and very gradually, ether rapidly and almost undiluted.

5. Should the patient hold his breath from any cause his first succeeding inhalation should be of pure air, or at least very slightly impregnated with chloroform; for the simple reason that this inspiration will be so deep as to take in too large a dose at a time, and thus violate what I would designate as the golden rule in chloroform anæsthetization; namely, the very gradual introduction of the agent into the lungs and the circulation.

6. The commission also approves the accepted test of touching the eyeball to see if the patient's feeling is sufficiently obtunded for the operation to begin, and advise that no operation be begun till this degree of anæsthesia is obtained. The reasons for not doing so are two-fold; surgical shock and alarm are prevented, and the patient is not excited to struggle and resist.

7. The commission say, "The administrator should be guided as to the effect entirely by the respiration. His only object, while producing anæsthesia, is to see that the respiration is not interfered with." In this respect we do not recognize the coincidence alluded to between the "practical conclusions" of the committee and the previously accepted rules for the management of chloroform anæsthetization. Nor do I think that those who continue to use this agent

will be willing to thus entirely ignore the circulation. The eye can watch the respiration and the finger at the same time take frequent cognizance of the pulse stroke, as has been the universal custom hitherto. The two duties are not incompatible, and surely the careful noting of the frequency and character of the pulse must be of no little precautionary service.

8. "If anything interferes with the respiration in any way, however slightly, even if this occur at the very commencement of the administration, if the breath be held, or if there be stertor, the inhalation should be stopped until the breathing is natural again." This important injunction has long received the endorsement of those experienced in the use of chloroform.

9. "If the breathing becomes embarrassed, the lower jaw should be pulled or pushed from behind the angles forward, so that the lower teeth protrude in front of the upper. This raises the epiglottis and frees the larynx. At the same time it is well to assist the respiration artificially until the embarrassment passes off." And, "If, by any accident, the respiration stops, artificial respiration should be commenced at once, while an assistant lowers the head and draws forward the tongue with catch forceps, by Howard's method, assisted by compression and relaxation of the thoracic walls, etc." These propositions are in the main quite in accordance with established usage.

10. The previous administration of alcohol, the commission say, may be resorted to "provided it does not cause excitement, and merely has the effect of giving a patient confidence and steadying the circulation." This plan was generally adopted by the late Warren Stone, of New Orleans, and many of us still follow his example, especially with those who are debilitated from any cause.

11. It has also been customary with some to give a dose of morphine hypodermatically ten or fifteen minutes in advance. This has also met the approval of the commission. It would seem reasonable that this should not be done unless the fact be known that the patient does not belong to that rather numerous class who suffer severe after-nausea from morphine.

The commission concludes that there is nothing to show that atropine does any good, and that "it may do a great deal of harm."

As a final conclusion the "commission has no doubt whatever, that, if the above rules be followed, chloroform may be given in any case requiring an operation with perfect ease and absolute safety, so as to do good without the risk of evil."

Pretty positive words! And could the busy practitioner of surgery accept with unquestioning faith the deductions thus positively drawn, after painstaking and able experimental research, by those well worthy of our confidence, the question of choice would be settled.

But hardly had the report of this commission fairly reached the general mass of the profession before Drs. H. A. Hare and H. C. Wood published the results of experiments made by them; and these results directly contradict those obtained by the Anglo-Indian Commission. The American experimenters assert that "though 450 pariah dogs in India have died of respiratory failure, an equal number in America have died of cardiac arrest; whilst the records of clinical medicine show that death in the human being from chloroform usually takes place either by primary arrest of the heart or by simultaneous arrest of the heart and the respiration, while in etherization the respiration usually ceases distinctly before the heart's beat."

In this conflict of statements, what are we to say? Shall we assert that all this conscientious work has been in vain, since such opposite conclusions are reached by equally reliable investigators? We trust not. Rather let us hope that further and still more thorough investigations may be the result; and, more important still, let us hope that as an aid to the settlement of this *questio vexata* every case of death under and after the use of either agent shall be carefully noted in all its details, and faithfully recorded in the journals. After all it seems to the speaker that a final settlement of their respective merits can only be reached through such clinical studies faithfully recorded. Some consider that the question has been so settled in favor of ether; but this is denied by large numbers of experienced and able surgeons, and by them such a statement as that in the latter portion of the last quotation (from the American experimenters) is regarded as a *petitio principii*. They deny that clinical records "show that death in the human being from chloroform usually takes place either by primary arrest of the heart, or by a simultaneous arrest of the heart and the respiration, while in etherization the respiration usually ceases distinctly before the heart's beat."

It must be remembered, too, that there are other points to be settled besides the question of sudden death during anæsthesia. If it be granted, for the sake of argument, that chloroform anæsthesia affords a larger proportionate number of sudden deaths, it has yet to be determined to what an amount this ratio must be discounted by the number of deaths attributable to the asserted more serious after effects of etherization, particularly in the stomach and the kidneys. It will be extremely difficult to settle this matter by statistics. The sudden deaths are promptly credited to the agent used; the subsequent deaths may be just as certainly due to the effects of the anæsthetic, but are often attributed to other causes. At least such is the belief of a large number of

competent surgeons, who still think that chloroform is the preferable agent, and who maintain that in the long run it is just as safe as ether, if used with the same caution demanded when we employ any really efficient agent in medicine. Is it not a law, indeed, that our most efficient agents are really most dangerous when handled carelessly? The simple fact, then, that chloroform is the most dangerous anæsthetic is no more an argument for its abandonment than the fact that opium and its alkaloids should be discarded because they are the most dangerous anodynes and narcotics. Electricity is the most dangerous and powerful form of energy. Shall we therefore abandon its use? Rather increase our endeavors to the better control of it for useful purposes. Those who use chloroform admit it to be the most powerful anæsthetic, just as opium is the most powerful anodyne; but they believe it can be so controlled as to safely subserve the purposes of anæsthesia. Have these recent experiments strengthened their position, or not? I will not presume to answer the question, but refer the matter to a "committee of the whole" of our profession, with the repeated suggestion that a continued careful clinical study of the subject, with a conscientious record of the cases, should be considered the binding duty of every operator who uses either agent.

It may be appropriate to also suggest that the assertion of Ostertag, published quite recently (*Deutsche Medizinal Zeitung*, Jan. 16, 1890), to the effect that late deaths in animals from prolonged administration of chloroform resulted from fatty degeneration of the myocardium induced by it, is worthy of further investigation. Deferred deaths from chloroform are, however, very rare; but, nevertheless, everything possible bearing on this important subject should command careful consideration.

LOCAL ANÆSTHESIA.

Not a little excellent work has been done during the year in the way of more exactly defining the qualities and uses of the more recently introduced therapeutic agents; and as illustrative of this fact we note that poisoning by the local use of cocaine has been carefully studied by Dr. A. Wolfler. As a result he has drawn the following practical conclusion: "In small operations on the extremities or trunk a gram of a 5 per cent. solution may be safely injected; whereas in the face, with the exception of the mouth and throat and the hairy scalp, more than two centigrams should never be used." (*Wiener Med. Woch.*, No. 18, 1889.)

ANTISEPSIS.

As a result of his indefatigable labors in this line, Prof. Lister presents a new antiseptic for our trial, namely, a double cyanide of zinc and mercury. Its advantages are claimed to be superior to any antiseptic hitherto used in the following particulars: It is non-volatile, unirritating, insoluble in water, but soluble in 3,000 parts of blood serum, and a solution of 1 to 1,200 is sufficient to keep animal fluids permanently free from putrefaction, "though it possesses but little germicidal value;" but this defect is remedied by using in the preparation of the gauze a solution of 1 to 4,000 of bichloride, "enough to be germicidal, but too weak to be markedly irritating." Prof. J. W. White has used it with satisfaction, and a description of the method of preparing the gauze will be found in the *American Journal of Medical Science* for January, 1890, p. 82. Anything coming from such a source, and with such American endorsement, should receive our careful consideration.

A thoroughly efficient antiseptic for general use without irritative qualities is certainly a desideratum; and if this proves to be such an agent surgery will owe another debt to the great apostle of scientific surgical cleanliness, which is the sum and substance of antiseptic surgery.

And in this connection it will be appropriate to notice the admirably practical researches recently made by Assistant Surgeon Joseph Kinyoun, and embodied in a report published by the Marine-Hospital Service in its "Weekly Abstract of Sanitary Reports" (Vol. iv, No. 47). It is on the subject of "Microörganisms in Finger Nail Dirt," and specially deals with the danger lurking about the finger nails of hospital nurses. The subject well merits the closest investigation, and is of vital importance not only to the surgeon but to the obstetrician, not only in hospital service but in private practice. If the statement made some years ago by a distinguished gynecologist, that many a woman's death warrant was carried to her under the finger nails of her medical attendant, be true, what need we not fear from the ignorant, and not infrequently grossly uncleanly nurses outside as well as inside of hospitals? Dr. Kinyoun, in this report, gives startling confirmation of these most reasonable fears. Permit me to quote briefly from a synopsis of his report to be found in the *New Orleans Medical and Surgical Journal* for February, 1890, p. 591:

"The examinations were so timed as to take the nurses when they were making or assisting in dressings, or just before an operation. In all twenty-seven nurses were examined, and of these only two carried no microörganisms in the dirt under their finger nails." Again: "A careful bacteriological examination was made of the walls and tables with which the hands of the nurse had not come in contact, and in no instance were there any pus organisms found. Whereas, on the other hand, the articles which were used by the nurse, such as irrigating tubes, basins, etc., including coverings to surgical dressings, gave pus microorganisms."

How are we to avoid these unseen dangers? The report deals with this question by the following experiments: After the hands of all the nurses had been thoroughly washed with soap and warm water, they (the hands) were "infected" with staphylococcus pyogenes aureus, then scrubbed well with soap and warm water, then treated for six minutes with alcohol containing (1 to 3,000) bichloride, then in bichloride solution (1 to 500), (1 to 1,000), (1 to 1,500), (1 to 2,000), (1 to 2,500), respectively, for another six minutes, and then neutralized in the usual manner. The Esmarck tubes made from the nail scratchings of the hands subjected to (1 to 500), (1 to 1,000), (1 to 1,500), remained sterile, but in the others there were many colonies of staphylococcus pyogenes aureus.

Let us hope that so important a matter will attract the attention of other bacteriologists. Should these examinations be confirmed, we will be able to congratulate ourselves on the possibility or soon having it in our power to formulate definite rules for our guidance in such matters.

DRESSING OF WOUNDS.

Some very remarkable statements in regard to the "Dry Method of Wound Treatment" have been made by Dr. Lauderer, of Leipzig, in an address before the German Congress of Surgeons. He asserts that he has had primary union in ninety consecutive cases, many of great importance, as resections, amputations, etc. No fluid is allowed to touch the wound. Dry aseptic gauze is used in place of moist sponges and irrigating fluids, and pieces of the gauze are simply applied to the wound.

The advantages claimed are as follows: 1. The patient is not exposed to wet and cold. 2. The loss of blood is minimal. 3. Absorption of antiseptics is not possible. 4. Time of operation is decreased. 5. Rapid recovery, only one dressing being necessary, and that only if non-absorbable stitches are used. 6. Saving of surgeon's hands.

The speaker has employed this method in a limited number of cases, and so far with satisfactory results.

The question of drainage or no drainage in wounds is still *sub judice*, with able advocates on both sides; but the majority of surgeons still incline to its judicious use in all cases where perfect asepsis is uncertain, and where the surfaces cannot be kept supported in absolute and continued juxtaposition. A recent paper read before the Société de Chirurgie (*L'Union Médicale*, May 9, 1889), by Jules Boeckel, is worthy of note in this connection. He reports the results of thirty-three major operations treated without drainage, with only two deaths, and these not attributable to anything connected with the technique of the operations, one case dying from pneumonia and the other from tubercular meningitis. Some of these cases were such as would seem specially to require drainage; as, for instance, a case of resection of the knee and one of amputation of the breast, with the removal of axillary and supra- and infra-clavicular glands, with division and suturing of the clavicle to admit of the removal of these glands. He sometimes puts in what he calls a "pseudo drain" made of a pencil of iodoform. Generally one dressing sufficed.

SURGERY OF THE HEAD AND SPINE.

During the last twelve months there seems to have been started a rather conservative reaction from the hopeful tone given to cerebral surgery by the combined influence of antiseptic procedures and the more or less successful study of the subject of functional brain localization. Progress in a new field is apt to be carried, by the very enthusiasm which insures success, beyond the bounds of prudence, necessitating a halt and a careful survey of the new ground freshly conquered. In the new cerebral surgery this survey is now being made. Bergmann's work on the "Surgical Treatment of Diseases of the Brain," very recently issued, is an able exponent of the present attitude of surgical thought in this regard. Time does not permit an adequate consideration of this very interesting and important matter, but I may be permitted to call your attention to a few points illustrative of the general tendency alluded to, which I cull from a review of the above named work in THE JOURNAL of this Association for August 31, 1889. He warns very strongly against opening the skull, "unless a definite diagnosis has been made" in supposed abscess of the brain.

Again: "The author is much less hopeful regarding surgical relief for tumors of the brain. The tumor may be diagnosed, but it may be difficult to locate it definitely. It is also impossible to determine whether it can be enucleated, and, if this is possible, whether or not it will recur." In the 100 cases of tumor collected by H. White, only "nine might have been relieved by surgical operations, but of these seven could not have been diagnosed on account of their location. In cases in which a tumor cannot be located definitely, exploratory trephining is not justifiable. Aside from the possibility of not finding the tumor there are two great dangers, viz: hæmorrhage and secondary œdema. All of these principles are confirmed by clinical histories of cases observed by himself or others."

And yet, on the other hand, a tendency has been shown by certain eminent alienists to induce us to extend the field of operative cerebral surgery in a new direction. In an able editorial in THE JOURNAL of this Association for February, 1890, allusion is made to a case, reported by Dr. T. C. Shaw, of general paralysis of the insane, in which

trephining and incision of the dura mater was practiced. This was done under the conviction—confirmed by Ferrier, who was also consulted in the case—that there were irritative processes in the upper layer of the convolutions, with later pressure symptoms; and as nerve stretching (suspension?) had proved beneficial in ataxia, brain stretching—that could only occur by increasing its space for expansion—would relieve the pressure of the cerebral fluid and diminish the arterial tension that the sphymograph has shown existent in such cases.

Mr. Harrison Crippe made an opening one and a half inches long by three-quarters wide and cut the dura mater, when "considerable quantity" of subarachnoid fluid escaped. By the tenth day the wound had healed, and no cerebral symptoms had been present after the operation. Though there was but slight improvement in the bulbar symptoms, those of *folie de grandeur* no longer existed. The patient was seen by Dr. Clifford Allbut, who agreed with Dr. Shaw that the man was no longer insane.

The editor continues the subject by mentioning somewhat analogous proceedings in a case of syphilitic paresis, previously reported by Tuke, who saw it in consultation with Dr. Muirhead, in which "the hallucination ceased for five days," but relapsed and recurred, and no benefit resulted. But in this case the opening was not so large as in the other, and no attempt at drawing off the subarachnoid fluid was made, "an omission that Dr. Tuke would have remedied had the case remained under his care."

As might have been expected, this rather radical departure from the usual hopeless programme in the treatment of such cases has been promptly met with opposition and condemnation on the part of other alienists, and to this department of our profession we as surgeons must mainly leave the decision, only endorsing the concluding portion of the editorial from which I have derived the above facts, *i. e.*: "But the gentlemen associated in these two cases occupy positions that entitle them to a respectful hearing from the profession, and the operation must be condemned, not by theory, but practice."

"A suggestion, supported by the report of a very successful case, as to the repair, by transplantation, of osseous defects in the skull after trephining, comes from Dr. R. Jaksch (*Wiener Med. Woch.*, No. 38). He used, with every antiseptic precaution, the skull bones of a gosling a few days old. He purposely left the wound open in order to observe exactly what occurred, and was certain that 'vitality was preserved in the bone plates, and that the ossification of the opening in the skull proceeded from them. The transplanted bone plates effected an organic connection with the surrounding parts.'" (JOUR. AM. MED. ASS., Dec. 14, 1889.)

It is not improbable that we will find it best as a rule, in transplanting operations in general, to select our materials from the tissues of the young animal, where, it is reasonable to suppose, the more active proliferating tendencies characterizing all the nutritive processes at that period of life would favorably effect the graft.

The subject of surgical intervention in diseases and injuries of the spinal column and cord has for some years been attracting a large share of interest. Stimulated by the successes achieved by Horsley, Macewan and others, in cases sometimes of apparently desperate character, many others have entered the field and are prospecting it with some success; but sufficient clinical data have not yet been accumulated on which to formulate definite rules. Good work, however, is being done by able hands, which cannot but result in a more successful management of these most distressing cases. At the last meeting of this body the matter was well handled by the Chairman of the Surgical Section, Dr. N. P. Dandridge, of Cincinnati, in his address to the Section, and Dr. J. William White, of Philadelphia, read an able paper on the same subject. Allingham has since reported two cases of operation in cases of injury (*Lancet*, June 1, 1889), and published his views in relation to the points still under discussion, in the following general terms: He believes "1. That by trephining it is evident that inflammatory ascending changes are prevented. 2. That no bad symptoms follow from opening the dura mater and allowing the cerebro-spinal fluid to flow out. 3. The operation, although tedious, is not a difficult one to perform, and does not in any way diminish the chance of recovery."

It may be safely predicted that, as the study of this department of surgery becomes more developed, it will be found that the same general principles will apply here as in the management of analogous injuries and diseases of the skull and its contents, modified, of course, by the differences in the anatomical conditions.

SURGERY OF THE THORAX.

Nothing specially worthy of remark has been developed in very recent years in this division of surgery.

SURGERY OF THE ABDOMEN.

So much is being done here, and so numerous and able are the publications and new devices offered for facilitating and improving the technique of the many operative procedures now practiced in this region of the body, that it is difficult for me to select the points most appropriate for consideration on this occasion.

What may be termed therapeutic laparotomy is one of the latest developments of abdominal surgery. At a recent congress of surgeons in Europe (JOURNAL OF THE AM. MED. ASS., Dec. 21, 1889, p. 899) the "surgical treatment of peri-

tonitis was considered a modern triumph," and numerous important communications on the subject were presented. Mr. Lawson Tait uses the following language in a recent publication: "I have had more than one occasion to draw attention to the astonishing disappearance of tumors, often of large size, after a mere exploratory incision." . . . . "The cases in which I have seen tumors disappear in this way have mainly been cases of diseases of the liver, spleen, and head of the pancreas," and "at least one case of uterine myoma." . . . . "That a therapeutic change is effected in the peritoneum itself by the mere opening of the cavity is now universally recognized in the treatment of what we call tubercular peritonitis by abdominal section. I have now had a large experience on this point, and can say positively that we can cure permanently and speedily cases that have gone even as far as suppuration, by opening and cleansing. . . . And in the non-purulent cases I very often do no cleansing at all, but merely empty out the serum and put in a drainage pipe. Yet the great majority of these cases are cured by these simple means." He further states that "four times in my life I have opened the abdomen for the purpose of removing enlarged spleens, and in every one of the instances I have been deterred from proceeding with the operation by reason of the hopelessness of the outlook for the patient. Strange to say, in three of the four patients the tumor has disappeared, and they are now to my knowledge—or were, at least, quite a short time since—in perfect health; the fourth succumbed to the exploratory incision."

These are certainly remarkable statements, and would, notwithstanding the high authority from which they come, be received with a natural incredulity; but he is not alone. Bouilly reports six cases of puerperal peritonitis to the last French Congress of Surgeons, which were treated by incision, the hot water douche, and dressing with a large drainage tube and antiseptic material (*Archives de Tocologie*, No. 12, 1889), and other writers in various parts of the world are taking up the subject and report more or less favorably in regard to it. It will not be hazarding too much, then, to say that what may be designated as therapeutic laparotomy has come to stay, though perhaps with but a limited yet important field for its application, and that the rules and principles to guide us in its performance are being rapidly formulated.

Speaking of therapeutic laparotomy calls to my mind the fact that what may be with equal propriety designated as prophylactic laparotomy is in some quarters decidedly growing into favor as applied to certain cases of relapsing typhlitis and appendicitis. It is evident that year by year there is an increasing tendency in favor of removing the appendix vermiformis in those cases where repeated inflammations of this useless relict of a previous stage of human evolution threatens the life of the patient from perforation and consequent acute peritonitis, or from dangerous suppurative cellulitis. It is probable that the operation may have been, and may continue to be, performed unnecessarily, for we have all seen cases where the appendicitis has repeated itself at longer or shorter intervals, with full recovery and finally no recurrence for years, if at all. Then there are other cases characterized by graver symptoms, more frequent recurrence, and with localized tendencies of greater persistency. These latter are more likely to be followed by typhlitis, perityphlitis, or peritonitis of a very dangerous type, resulting from perforating ulceration. These more serious cases are the ones in which a prophylactic laparotomy for the removal of the appendix would seem most appropriate.

In the pathology of this trouble, we may notice a marked analogy to the relations recognized to obtain between the various degrees of salpingitis and pelvic peritonitis, and pelvic cellulitis. In each case there is a tube readily retaining noxious matters so hidden away from the general current, if I may so express myself, of the mucous surface to which it belongs, as to favor the retention of such matters. In each case such retention soon invites inflammatory action, which then tends either to the production of localized peritonitis with adhesions of surfaces, or neighboring cellulitis, or both peritonitis and cellulitis, producing a vast variety of results differing in importance in each case. Just as pelvic peritonitis, pelvic cellulitis, pelvic abscesses with all their possible complications, may have their origin in salpingitis—frequently gonorrheal in character—so does appendicitis produce typhlitis, perityphlitis—which is lumbar cellulitis—perforating stercal abscesses, cellulo-peritonitis or general peritonitis from perforation.

It would seem that the same general surgical principles should apply to both classes of cases, modified to suit the differences in anatomical relations. As the gynecologist should only remove the tubes when other means of relief prove unavailing, and the life or the usefulness of the woman demands it; so the operation of appendicectomy—if I may be permitted to suggest the word—should be reserved for the cases where frequent recurrence and increasing gravity threaten to end in the dangerous results of perforation or suppuration. Trevis, in England, (*British Med. Jour.*, Nov. 9, 1889); and Senn, Jour. Am. Med. Ass., Nov. 2, 1889), McBurney, (*New York Med. Jour.*, Dec. 21, 1889), and Weir, *Med. News*, March 1, 1890), in America, have contributed able papers on this interesting subject within the last year well worthy of the study of practitioners of medicine as well as of surgeons.

The principles involved in the resort to lapar-

otomy for traumatism, as well as the rules for the technique of the various abdominal operations to repair injuries or remove obstructions, etc., are yearly becoming more definitely established; but this field is too extensive for me to enter, and too important to be cursorily considered. The comprehensive paper read before the Surgical Section last year by Prof. T. S. N. Morton, of Philadelphia, and the work published since by Prof. N. Senn, of Milwaukee, on "Intestinal Surgery," give a full study of the subject up to date, and should be read by all medical men who desire to be abreast of the times in regard to this important advance in modern surgery.

There are many other matters, gentlemen of the Association, to which I am tempted to allude, but time admonishes me that I must bring this Address to a conclusion ere your patience be entirely exhausted. All the subjects which have been brought to your attention have much in them of common interest to all branches of medicine. Indeed, in the vast range of our activities, it would be difficult to find any important question whose successful investigation is not of more or less service to each and every department or specialty of the profession. We are thus again reminded of the fact—alluded to in my introductory remarks—of the absolute unity of the medical profession, notwithstanding the number of special branches into which this working brotherhood is divided. Let our specialist never forget this fact, or he will soon wander out of alligument with scientific medicine; and let us all ever cherish this feeling of unity in diversity, remembering the great cause in which we fight, and that whatever advances be made in one part of the field must beneficially effect the whole line of battle. He who keeps ignorant as to how far all the divisions of the army have advanced, or what strongholds they occupy, will be soon irretrievably lost in the rear.

ADDRESS OF THE CHAIRMAN OF THE SECTION ON STATE MEDICINE.

Delivered at the Forty-first Annual Meeting of the American Medical Association, held at Nashville, Tenn., May, 1890.

BY JOHN B. HAMILTON, M.D., LL.D.,

SUPERVISING SURGEON-GENERAL OF THE MARINE-HOSPITAL SERVICE OF THE UNITED STATES.

Gentlemen:—I congratulate you, on this annual reunion, that we have met in a city famous for its beauty, its salubrity, its educational institutions, its boundless hospitality, its "Hermitage," and not least that we are here in the home of that veteran of sanitary science who so ably presided over the deliberations of this Section last year, and whose presence among us to-day is at once an inspiration and a source of pleasure.[1]

In accordance with the time-honored custom it becomes the duty of the Chairman of this Section to give a short address, and I assure you that addressing so distinguished a body, largely composed as it is of medical gentlemen who make the business of public health their chief business in life, is a matter of no little anxiety.

First of all let me thank you for the honor conferred upon me by election to the Chairmanship of this Section; but I esteem it less a personal compliment than a recognition of the great medical service of which I happen to be, at the present time, the commanding officer; a service, I may say, whose members are, to a man, enthusiasts on the subject of public hygiene, and whose labors, I trust, will reflect credit upon their country and their chosen profession. Owing to the peculiar relations which the Marine-Hospital Bureau bears in relation to the public health in this country, it is perhaps fitting that I should refer somewhat to the operations of that Bureau during the past year, and briefly sketch what changes have taken place since our last meeting in Newport.

Largely through the favor and support of the American Medical Association, and especially of this Section, Congress has strengthened the hands of the Bureau by enactments which have come in what I may truly call its developmental stage, for in the very nature of things it is impossible that its development can ever be completed; for with equal pace with the general diffusion of knowledge and the advancement of sanitary science new problems arise for solution, and new factors of extension and for the prevention of disease are presented for consideration.

The work of the Marine-Hospital Bureau in public health matters during the year has been confined to increasing the facilities at the different quarantines for treatment of vessels, the publication of a weekly abstract of sanitary reports, with which most of you are familiar, and the increasing of the facilities for laboratory work. There are two laboratories now fitted up with ample appliances for bacteriological work. One of them is intended for a general hygienic laboratory, and is at present located in New York. It is greatly desired that this laboratory shall be removed, at no distant day, to the National Capital and placed in a suitable building, where its usefulness may be greatly increased and its work conducted under the more immediate supervision of the Bureau. The other laboratory has been established at the Key West Quarantine Station, on Tortugas Key. It is intended that the questions connected with the etiology of yellow fever shall be assigned to this laboratory, while the one at New York is for general hygienic work. Special investigations have been conducted at the New York laboratory on the hot air treatment for pulmonary phthisis, a detailed account of which was published in the

[1] J. Berrien Lindsley, M.D.

Abstract of Sanitary Reports for September 6, 1889; on various sources of infection in surgical wards; on specimens that have been referred to the laboratory from different stations, and the careful investigations of the cases of malarial and enteric fevers occurring at the Marine Hospital at New York, for the purpose of establishing the presence of plasmodium malaria in the blood, and of the bacillus of Eberth in the spleen or intestinal canal. In the latter investigation Dr. Kinyoun gives the following conclusions:

1. Malarial and enteric fevers are not antagonistic to each other.

2. A differential diagnosis between the two diseases is sometimes impossible.

3. There exists a mixed form of infection which can be diagnosed by means of bacteriological and microscopical examination.

An interesting observation as to the therapeutical effect of cobra poison is now going on at the laboratory. The origin of this investigation is as follows:

A little over a year ago Mr. Peroux, of Calcutta, wrote to the Bureau, stating that the natives in India were in the habit of treating cholera in its commencement with minute doses of a substance which proved to be cobra poison, and that the treatment had seemed to be pretty generally successful. This statement was made with a request that the Government would investigate the matter with a view of ascertaining the action of cobra poison on the cholera bacillus. After some difficulty and the lapse of some time a considerable quantity of the poison was procured and is now being examined. The experiments are not completed, but Dr. Kinyoun has informed me that the cobra poison, in a very minute quantity, is a germicide of extremely high power, and that it is fatal to the development of cholera germs. Control experiments are now going on, and he hopes to be able to make a complete report on this subject by the close of the present fiscal year.

THE INTER-STATE QUARANTINE ACT.

The President signed the Inter-State Quarantine law March 28, and with this law the general measures advocated for some time past are completed. The Act of April 29, 1878, inaugurated the system of reports from our consuls abroad, and prohibited the entry of infected ships. The Act of August 1, 1888, established United States quarantines wherever the sanitary defenses of our coast seemed incomplete, and the present law provides that when it shall appear to the satisfaction of the President that cholera, yellow fever, small-pox or plague exists in any State or Territory, and there is danger of the spread of any of those diseases to any other State or Territory, then regulations for the prevention of its extension shall be framed by the Supervising Surgeon-General. When these regulations are approved by the Secretary of the Treasury and the President, they are binding upon the general public, and specifically upon officers of the Government, common carriers' agents, officers and employés. A severe penalty is prescribed for violation of the regulations so framed. Another feature of this new law is the fact that violations of any of the general quarantine laws of the United States are made punishable offenses. It was a radical defect in the law of 1878 that no penalty was prescribed for the violation of its provisions, and in cases actually tried no fines could be imposed.

Taking the three acts as a whole, there is now authority for the exercise of governmental control whenever any extraordinary emergency shall require it; and for the performance of the ordinary quarantine service and the collection of sanitary information the Marine-Hospital Bureau is greatly strengthened by the new Act. The following is its text:

AN ACT TO PREVENT THE INTRODUCTION OF CONTAGIOUS DISEASES FROM ONE STATE TO ANOTHER, AND FOR THE PUNISHMENT OF CERTAIN OFFENSES.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That whenever it shall be made to appear to the satisfaction of the President that cholera, yellow fever, small-pox or plague exists in any State or Territory, or in the District of Columbia, and that there is danger of the spread of such disease into other States, Territories, or the District of Columbia, he is hereby authorized to cause the Secretary of the Treasury to promulgate such rules and regulations as in his judgment may be necessary to prevent the spread of such disease from one State or Territory into another, or from any State or Territory into the District of Columbia, or from the District of Columbia into any State or Territory, and to employ such inspectors and other persons as may be necessary to execute such regulations to prevent the spread of such disease. The said rules and regulations shall be prepared by the Supervising Surgeon-General of the Marine-Hospital Service, under the direction of the Secretary of the Treasury. And any person who shall willfully violate any rule or regulation so made and promulgated shall be deemed guilty of a misdemeanor, and upon conviction shall be punished by a fine of not more than five hundred dollars, or imprisonment for not more than two years, or both, in the discretion of the court.

SEC. 2. That any officer, or person acting as an officer, or agent of the United States at any quarantine station, or other person employed to aid in preventing the spread of such disease, who shall willfully violate any of the quarantine laws of the United States, or any of the rules and regulations made and promulgated by the Secretary of the Treasury as provided for in section one of this act, or any lawful order of his superior officer or officers, shall be deemed guilty of a misdemeanor, and upon conviction shall be punished by a fine of not more than three hundred dollars, or imprisonment for not more than one year, or both, in the discretion of the court.

SEC. 3. That when any common carrier or officer, agent, or employé of any common carrier shall wilfully violate any of the quarantine laws of the United States, or the rules and regulations made and promulgated as provided for in section one of this Act, such common carrier, officer, agent or employé shall be deemed guilty of a misdemeanor, and shall, on conviction, be punished by a fine of not more than five hundred dollars, or imprisonment for not more than two years, or both, in the discretion of the court.

Approved March 28, 1890.

But one opportunity has been had, up to the present time, for carrying into effect the provisions of this Act. The State Board of Tennessee, having had it reported that an epidemic of small-pox was prevalent in an adjoining State, and that the measures for its control were not sufficiently strict, made application to the Bureau to cause such measure to be taken as would prevent its spread to their State, but investigation proved that the original reports were groundless; hence no action was taken.

The United States has now assumed the duty of inspecting the immigrants bound for our shores, a duty heretofore imposed on the State authorities, and it will be possible to have a much better sanitary surveillance over them than heretofore. This step constitutes, in my judgment, a distinct advance in the sanitary defenses of the country.

EPIDEMIOLOGY.

No serious epidemic of yellow fever, or cholera, or small-pox has occurred within the limits of the United States during the present fiscal year, although some isolated cases of yellow fever have appeared at Key West. At the latter place it appears beyond doubt, from recent investigations by Sanitary Inspector Posey, that, owing to the local conditions, the city of Key West is in danger of becoming a centre for the dissemination of yellow fever. This is all the more deplorable from the fact that it appears from his report that this arises from lack of the plainest observance of hygienic rules. The use of cess pools within the city limits, bad water supply, entire lack of drainage, general lack of municipal cleanliness, affording favorable conditions for the propagation of the hypothetical germ of yellow fever. It is believed, however, that as its condition is now well known not only in Florida, but throughout the United States, the local authorities will be stimulated up to the point of placing this city in a proper hygienic condition. No city in the Union is more favorably located by nature for a sanitarium than the city of Key West. The beautiful island is crowned by royal palms, bathed in sunshine, and fanned by the sea breezes and steady trade winds. In a region of perpetual summer, its atmosphere is always balmy. The island itself is a coral rock, on which but a small amount of alluvium is found, sufficiently high to insure good drainage. There is no reason why Key West should not be a terrestial paradise if the inhabitants so willed it and would only take the necessary steps to perfect its hygiene, raze its hovels and build better dwellings.

A detailed account of the sanitary condition of Key West will be found in the Abstract of Sanitary Reports for March 14, 1890.

INFLUENZA.

An epidemic most serious in its results, but, singularly enough, entirely free from the production of a panic, was the epidemic of influenza which swept over this country during the past fall and winter. Many persons acquainted with the history of previous epidemics of influenza were inclined to make light of it at first, and to predict the most trifling consequences; but it was found that the mortality from pneumonia, from phthisis, and from respiratory affections generally was very much increased, and it soon became known as more destructive than those diseases, apparently more dangerous on account of these collateral effects mentioned. To the epidemiologist the course of influenza, viewed in the light of modern bacteriology, seems one of the most wonderful phenomena of nature. That an epidemic having arisen in one of the most remote parts of the globe should suddenly, in a few weeks, extend itself over so vast a space, is surely worthy of the most attentive study. Through the State Department I hope, at no distant day, to be able to ascertain in what part of the world this influenza first made its appearance; but as yet it has not been traced beyond its original appearance in St. Petersburg, Russia, in November, 1889. A statement has appeared, however, from Danish sources, to the effect that the disease was in Iceland in May, 1889. This report, however, has not been confirmed. The legation at St. Petersburg has been written to obtain from Russian sources an account of the origin of this epidemic. So far as is known, no inhabited country has escaped an attack of the disease, and although originating in the North, yet the scorching sun of the tropics appeared to have no influence in arresting its progress. From the northern latitudes to the tropics, thence to the extreme south, westward to the Polynesian island and the Indian ocean, persons, and in some instances animals, have been affected by the disease. As might have been expected, it proved much milder in the tropics than in the higher altitudes, but its origin is as yet unknown, and although a particular bacillus has been assigned as the potential factor in its causation, it is as yet unaccepted.

LA NONA.

Another disease is reported in the public press to exist in Europe in circumscribed localities, under the name of "nona," and there is confirmation of it in medical journals, but none has been officially reported. It has been stated to be in this country, but the experience of the Bureau in the investigation of epidemics thus unofficially reported has been entirely negative. Many sensational reports are printed concerning alleged terrible epidemics, which on investigation turn out to be simple affections sufficiently well known and entirely without the province of local, State or National health officers. Dr. Broun, in the *Deutsche Medicinische Wochenschrift* of March 27, 1890, describes the disease, the principal symp-

tom of which is prolonged sleep. Pneumonia and meningitis occur simultaneously. All the cases reported have been fatal, and it is regarded as a combination of pneumonia and cerebro-spinal meningitis, perhaps due to the causes of influenza.

LEPROSY.

The American Public Health Association, at its meeting last November, passed a resolution requesting that the National Government take some means to prevent the introduction of leprosy into the United States. It had been known for some time that leprosy was increasing perhaps throughout the world, and this view would seem to obtain from the recent reports concerning its great increase in New Caledonia and other parts of the world where lepers, owing to increased facilities of transportation, find their way, and it was believed that the leprous settlements in the United States owe their origin to direct importations. While there exists no power in the National Government to seize a leper and confine him, there is ample power to prevent his coming within the limits of the United States. Under the Act of April 29, 1878, and under the more recent Inter-State Commerce Act, it will be possible to restrict his transportation from one State to another, provided State Boards of Health shall desire to coöperate. Without their coöperation it would be impossible, without an expense entirely out of proportion to the public necessity. On two occasions, I have visited the leper hospital of San Lazaro, in Havana, and have become convinced that the true policy of the country should be the confinement of all lepers on a public reservation set apart for them. The Sisters in charge of the hospital of San Lazaro assured me that no instance of transmission of the disease had been known, but the great number of lepers running at large in the Island of Cuba shows that the disease is propagated in some manner, and when I discovered that in this hospital various articles of bric-a-brac, wearing apparel, and other things were manufactured for sale and distributed throughout the Island, the means of its transmission did not seem far to seek. Moreover, these lepers at San Lazaro are not strictly confined to the hospital, such as are able to travel being allowed to go out on permit from time to time, and the discipline did not seem to me at all rigorous. In fact, the incarceration of a leper in this magnificent hospital seemed to be a guarantee that he was for the rest of his life to be provided for in comparative luxury. In my opinion the confinement of the lepers on a public reservation large enough to give ample space for their segregation, the entire separation of the sexes, and to give them opportunity for outdoor agricultural pursuits, is the true solution of the problem of what we are to do with the lepers in this country.

Under present regulations, no leper will be permitted to land in any vessel coming into the United States. The Circular in which this regulation was formulated reads as follows:

CIRCULAR.

REGULATION TO PREVENT THE INTRODUCTION OF LEPROSY.

1889. Department No. 130.

TREASURY DEPARTMENT,
OFFICE SUPERVISING SURGEON-GENERAL MARINE-HOSPITAL SERVICE.
WASHINGTON, D. C., DECEMBER 23, 1889.

To Medical Officers of the Marine-Hospital Service, Collectors of Customs, and others Concerned:

The National Quarantine Act, approved April 29, 1878, entitled "An Act to prevent the introduction of contagious or infectious diseases," provides that no vessel or vehicle coming from any foreign port or country where any contagious or infectious disease exists, or any vessel or vehicle conveying persons or animals affected with any contagious disease, shall enter any port of the United States, or cross the boundary line between the United States and any foreign country, except in such manner as may be prescribed.

Attention is now directed to the increased prevalence of the contagious disease known as leprosy in several foreign countries, and the danger of its increase in the United States through the immigration of persons affected with leprosy, and by direction of the Secretary of the Treasury the following regulation is framed under authority of the foregoing Act, subject to the approval of the President, to protect the people of the United States from the introduction of leprosy:

1. Until further orders, no vessel shall be admitted to entry by any officer of the customs until the master, owner, or authorized agent of the vessel shall produce a certificate from the health officer or quarantine officer at the port of entry, or nearest United States quarantine officer, that no person affected with leprosy was on board the said vessel when admitted to free pratique, or in case a leper was found on board such vessel, that he or she with his baggage has been removed from the vessel and detained at the quarantine station.

2. Medical officers in command of United States quarantines are hereby instructed to detain any person affected with leprosy found on board any vessel, but such officer will permit the departure on outgoing vessels of persons detained at quarantine in pursuance of this regulation, provided such vessel shall be bound to the foreign country from which the said leper shall have last sailed.

JOHN B. HAMILTON,
Supervising Surgeon-General Marine-Hospital Service.

Approved:
WILLIAM WINDOM, *Secretary.*

Approved:
BENJ. HARRISON.

Although perhaps only lightly contagious, it is clear to my mind that leprosy is inoculable, and for that reason, dangerous. At any rate, it is evident the country will not suffer if leprous immigrants are denied admission. Since the issuance of the Circular, one leper has been stopped by the Boston quarantine authorities. While this address was being written a report of a leper at Evansville, Ind., was received. The origin of this case has not yet been determined. The patient is a steamboatman, a native of the United States.

At the last meeting of this Section, the writer introduced a resolution which had previously been formulated at the Montgomery Quarantine Conference of 1889, in regard to international responsibility. This resolution, it will be remembered, was unanimously adopted by the Section, referred to the Association, and by the Association adopted. It for the first time distinctly announced the doctrine that a nation was responsible to other nations for maintaining a plague centre in its own territory. The paper which I read in support of the resolution, in this Section, has been reproduced in France, and read with approval to the Société Française d'Hygiene of Paris, by the distinguished Secretary-General, Dr. De Pietra-Santa. I subsequently had the opportunity of further elaborating this as a principle of international law, and presenting it to the Honorable the Secretary of State for transmission to the Committee on Quarantine of the International American Conference. It does not appear, however, to have borne fruit in that body, for the Committee on Sanitary Regulations reported to the Congress the following recommendations, which it will be seen have no reference to this proposition:

The International American Conference, considering:

That taking the existing state of the relations between the nations of America, it is practicable as it is advisable for the promotion of these relations, to establish perfect accord with respect to sanitary regulations;

That the greater part of the ports of South America on the Atlantic are guided and governed by the decisions of the International Sanitary Convention of Rio Janeiro, of 1887;

That although it does not appear that the plans of the Sanitary Congress of Lima, of 1889, have passed into the category of international compacts, it is to be hoped that they will be accepted by the Governments that participated in the said Congress, because those plans were discussed and approved by medical men of acknowledged ability;

That the Sanitary Convention of Rio Janeiro, of 1887, and the draft of the Congress of Lima, of 1889, agree in their essential provisions to such an extent that it may be said they constitute one set of rules and regulations;

That if these were duly observed in all America, they would prevent, under any circumstances, the conflict which usually arises between the obligation to care for the public health, and the principle of freedom of communication between countries;

That the nations of Central and North America were not represented either in the Sanitary Convention of Rio Janeiro or the Congress of Lima; but that they might easily accept and apply to their respective ports on both oceans the sanitary regulations before cited;

Recommends to the nations represented in this Conference the adoption of the provisions of the International Sanitary Convention of Rio Janeiro, 1887, or the draft of the Sanitary Convention of the Congress of Lima, of 1889.

It appears on careful examination that the plan of an International Sanitary Convention which was formulated by the American Sanitary Congress of Lima, in 1888, followed very closely the articles laid down in the International Sanitary Conference of Rome, in 1885. It, however, laid down a more detailed plan of quarantine, and it must be admitted that the plan of quarantine there named is admirable in many respects. It does not differ from the plans of quarantine at present adopted. It obliges each country to establish a maritime sanitary service, and provides for international recognition of their certificate. This is an undoubted advance on the existing state of affairs, and confidence in the certificates of unknown sanitary authorities is a plant of slow growth, yet it is believed that some international confidence will in time be established. Certainly the policy of non-intercourse between countries desiring to trade with one another is a relic of mediæval barbarism. Sanitary science has nowhere made greater advances than in its appliances for complete and safe disinfection.

INOCULATION AS A PREVENTION OF YELLOW FEVER.

The exhaustive researches of Surgeon Sternberg, of the Army, into the question of the etiology of yellow fever, and especially upon the prevention of yellow fever by inoculation, have been published in the last Report of the Marine-Hospital Service, and are sufficiently detailed to enable any one to draw their own conclusion as to the value of the inoculation. For myself, I may say that, notwithstanding all that has been said in favor of the methods of inoculation as a preventive of yellow fever, we must admit that since the time of the alleged discovery of Freire, Rio de Janeiro has been visited by a most disastrous epidemic of yellow fever, the mortality of which was fully as severe as that of previous epidemics; in fact, to-day, the only country from which the United States is seriously threatened by the sending out of yellow fever fomites is Brazil, and the place, the city of Rio de Janeiro.

I suggest that this Section take the papers of Sternberg and the more recent statistics of Freire, both of which I take pleasure in laying before you, and examine carefully those statistics, for the purpose of ascertaining whether they are, or not, such as carry weight to the mind of an unprejudiced person. I am the more ready to do this because of the claim made by a very distinguished gentleman, a member of the American Medical Association, one for whom I entertain the highest respect, that notwithstanding the researches of Dr. Sternberg, the statistics of Freire, as now published, have refuted every opinion adverse to his method. I submit, then, in view of this discrepancy, whether this Section does not owe it to itself, and to the Association, to appoint a Committee of Investigation of the papers as presented, with a view of presenting an opinion that may settle this controversy, so far as the opinion of the Association is concerned.

THE WORK OF THE SECTION.

I now present to you the Programme of the daily work of the Section, so far as completed,

and trust that it may be adhered to so far as possible, with a view to economy of time, and in accordance with the custom of the Association, which directs that such improvements in Section work shall be suggested, from time to time, by the Chairmen, as may occur to them. I have to say that the Secretary has prepared a register of the names of those in attendance, and a record book wherein to transcribe the minutes of the Section. It has been found impracticable to keep in memory alone a record of the proceedings of former meetings, reports of committees and various standing committees that are appointed from time to time. I have therefore thought that a record book, which can be transmitted from Secretary to Secretary at each annual meeting, will be not only a business way of conducting the affairs of the Section, but in itself, in the lapse of time, will constitute a valuable history of its meetings. I take pleasure in presenting to the Section its first record book, which I have entitled Volume I.

Trusting that the meeting may be as harmonious as it now promises, that it may be profitable to all of us, and asking your indulgence in advance for the short-comings of your presiding officer, I thank you for your attention to this somewhat desultory address.

ADDRESS OF THE CHAIRMAN OF THE SECTION OF OBSTETRICS AND DISEASES OF WOMEN.

Delivered at the Forty-first Annual Meeting of the American Medical Association, held in Nashville, Tenn., May, 1890.

BY WILLIAM WARREN POTTER, M.D.,
OF BUFFALO, N. Y.

Gentlemen:—It is a just ground for hearty congratulation that your lot has been cast in such a pleasant place, in which to hold your deliberations during this forty-first annual session of our noble Association, as is this beautiful city of Nashville—the Athens of the South, as it has been not inappropriately named—and I consider it a piece of rare good fortune that has fallen to me personally to have been chosen to preside over this body of scientific workers on this occasion. It would be a discourtesy not to express my appreciation of the honor you have done me, and a dereliction of duty not to thank you with warm words for so distinguished a mark of your favor. I crave your indulgence toward my shortcomings—no doubt they will be many—and appeal to you for support in the discharge of my duties now about to begin.

The letter of the By-laws of the Association requires that "the chairman of each Section shall prepare an address on the recent advancements in the branches belonging to his Section, including suggestions in regard to improvements in methods of work, and present the same to the Section over which he presides on the first day of the annual meeting." It will be my aim to comply with the spirit as well of this mandate; and, reversing the order named in the By-laws, let me first and briefly make those

SUGGESTIONS IN REGARD TO IMPROVEMENTS IN METHODS OF WORK

that have occurred to me as requisite, during an experience of a year's observation of the affairs of the Section.

One of the unprotected points in our organization is the failure of provision for the death or disability of the chairman—contingencies as likely to happen here as elsewhere—and in either case it seems to me the Section might suffer sadly for the want of a presiding officer. In such an event no doubt an acting chairman could be appointed by the President, but it might impair the usefulness of the Section for a year; and who can recall a year lost or wasted? The remedy against such misfortune, a simple one, lies in the election of a vice-chairman at the same time the other officers are chosen. This may, and no doubt will, require an amendment to the By-laws; but such action is easily obtained, for I have no doubt the reasonable nature of such a request would be recognized by the Association. Meanwhile, a vice-chairman can be elected at this meeting, subject to the passage of the proposed amendment.

Let me next call attention to the necessity of a register of the members of the Section, to include the names and addresses of those who manifest an interest in its meetings by regular attendance thereupon. Such a record is an almost indispensable necessity for the officers in conducting their correspondence in preparing for each annual meeting. It may become a convenience, also, in case a roll-call shall be ordered for any purpose, or should the ayes and nays be demanded on any question. Acting upon this hint I have provided such a book, in which a few names are entered as a beginning. The members in attendance at this meeting are requested to add theirs to the list, which is alphabetically arranged for convenience.

It would appear to me a very excellent plan to secure the services of the Secretary for a longer period than one year. This term barely affords opportunity to become acquainted with the duties of the office and with the members of the Section. His usefulness would be greatly enhanced by continuing him in service for several terms.

Finally, and as a matter of supreme importance, the question of reporting the proceedings in full and publishing them promptly after the adjournment of the meeting, is indissolubly connected with the prosperity of the Section. In these days of rapid transit and quick intercourse between even remote parts of our country, time saving methods become a necessity, and time economics a study. They are as important to pro-

fessional men as to anybody, and to none more than to the physician.

The brilliant thoughts that scintillate from the brain molecules during society debates, finding expression often in choice and vigorous English, are lost to literature unless caught up at once by the stenographer's art and preserved by the printer's skill. It cannot be expected that a speaker will be willing to retire from an interesting discussion to write out his own remarks, even to gratify that most amiable of men, the editor of a medical journal; he will not often do it even to ensure a correct report in a Transactions' volume bound in Russia and gotten up in the most attractive style of the printer's art. Moreover, in an Association like this, where there are many Sections and members naturally desire to attend the debates in several on the same afternoon, it would be a source of great satisfaction to have the printed proceedings to read carefully at home, amid the quiet surroundings of the silent hour, provided they could be furnished verbatim and with reasonable promptitude.

To the scientific worker, one of the great attractions of the special societies is the fact that he knows he will get the fruits of his labor preserved for reference and study in conjunction with those of his fellows, where he can carefully and critically review them to his own pleasure and profit. These special societies have on this account, *inter alia*, thriven even at the expense of interest in the American Medical Association. Many of our best men have said they would not come here and engage in hard and earnest work, if it is permitted to be lost to the medical world through indifference, apathy, or neglect of a carefully prepared report of the proceedings. I have felt constrained to allude to this subject because of its great importance to the Association. This is, so to speak, the period of the renaissance of the American Medical Association. The profession of the United States enjoy its meetings and will attend them, notwithstanding the strong ties of the special societies, provided the discussions are preserved with due regard to completeness.

The plan I suggest is, for this Section to employ a competent stenographer to report the discussions with perfect exactitude, and to publish its proceedings in pamphlet form as promptly as possible after adjournment. This pamphlet should contain abstracts of all papers read in the Section, made by the authors themselves, together with a full report of the discussions thereon. The expense of this must of course be borne by the Section, and an annual voluntary subscription of five dollars from each will be necessary to meet it. An editor should be appointed to supervise the publication of the proceedings.

This plan will in no wise conflict with the interests of THE JOURNAL. The complete papers will be published in it, together with such longhand abstracts as may be prepared under the directions of THE JOURNAL editor. An opinion has obtained among the editors of journals that a longhand abstract of a discussion is better for their use than a stenographer's report. This may be true; no doubt it is; but it does not answer the requirements of the members of a Section like this, who have no time to write out their discussions after they have been delivered, while at the same time they demand that the full proceedings shall appear in print.

These, then, are the suggestions of improvements in methods of Section work that it seems pertinent to offer at this time:

1. That the Section shall elect annually a vice-chairman, whose duties shall be to preside in the absence of the chairman, and to render such other assistance in the conduct of the Section work as may be properly imposed upon him.

2. That a register of the members of the Section shall be kept at each meeting by the officers, to be transferred to their successors at its close.

3. That the Secretary shall be chosen with a due regard to reasonable permanency.

4. That the proceedings of the Section shall be published in pamphlet form each year, the discussions to be reported by a stenographer. To meet this expense an annual subscription is solicited.

RECENT ADVANCEMENTS IN OBSTETRICS AND GYNECOLOGY.

It has not been difficult to comply with the requirements of the By-laws thus far; but now a more trying task confronts me. To report upon the recent advancements in the branches treated of in this Section has, of late years, been deemed a somewhat superfluous labor, in view of the easy interchange of knowledge through the enormous book and journal literature that is put forth annually. A more brilliant field would seem to offer in discoursing upon some special theme in one or the other of its subdivisions. Nevertheless, so long as the law is in full force, it cannot be evaded without doing violence to a principle that underlies all organizations of this kind. Bear with me, then, while I briefly mention two or three points of special interest in both obstetrics and gynecology, that have a practical bearing on methods of practice.

ASEPTIC MIDWIFERY.

The practice of surgery was not more completely revolutionized by the teachings of Lister, than was that of obstetrics through the application of similar principles to the conduct of labor and the care of the puerperal woman. Great as has been the gain in the saving of human life through aseptic surgery, the credit side of the balance-sheet of aseptic midwifery, which cannot be expressed in mere figures, is of infinitely greater importance in the life-saving problems that pre-

ventive medicine, in a self-imposed task, has sought to solve.

The doctrine of modern antisepsis as employed in obstetrics has a three-fold application: first, in relation to the conduct of labor; second, as affecting the child; and third, in the post-partum care of the puerperal woman.

The first lesson that aseptic midwifery teaches is that the parturient woman, whether of high or low degree, must be made absolutely clean in her person and surroundings. Her room must be clean, her bed must be clean, and everything used in the confinement room must be free from taint or odor. She may not be conditioned to have luxuries, perhaps hardly the necessities of the lying-in chamber, but she can and must have cleanliness.

Before the confinement—even immediately before—the woman should have an immersion bath when practicable; if not, then a thorough washing with soap and water. The abdomen, external genitals, nates, hips, and thighs must receive special attention in this cleansing process, and these parts must, at the finish, be thoroughly rubbed off with a weak sublimate solution. Just as the labor begins the vagina should receive a copious lavement of warm water, to terminate in a douche of at least a quart of sublimate water, 1 to 5,000.

If the law of aseptic midwifery is imperative in enforcing cleanliness for the woman, it is even inexorable in its mandates as regards the accoucheur. He must be as clean as soap and water can make him, supplemented with nail-brush and sublimate solution for his finger-nails, hands and arms. He must repeat the brushing of his fingers with the sublimate water before each examination, and the vagina must be invaded as infrequently as may be. The obstetric vicinage must, after delivery, be washed in warm sublimate water, and an antiseptic napkin applied to the vulva.

The child should receive immediate attention after its birth, particularly in the bathing of its face and eyes, a soft cloth dipped in weak sublimate water to complete the toilette of the eyes. Ophthalmia neonatorum, benign or specific, has become unknown where this plan has been strictly and neatly carried out.

During the puerperium following normal labor the propriety of washing out the vagina daily has been questioned by some obstetricians, and I will not presume to pass upon this point dogmatically; but, for myself, I may be permitted to say that if, at the end of forty-eight hours, the lochia is malodorous, it is safe practice to permit the vagina to be gently and thoroughly washed out with warm, weakly carbolated water, many or few times daily, according to necessity.

If, however, the labor has been instrumental, or if the hand has invaded the uterus for any cause, then the uterine cavity should certainly be cleansed with hot water, which may also be weakly carbolated or otherwise disinfected at the end of the lavement. Moreover, the vagina should subsequently be frequently washed out in an appropriate manner, for a number of days. While the abdominal surgeon has little if any use for chemical solutions, the obstetrician cannot dispense with them at present.

These are a few simple rules pertaining to the subject of aseptic midwifery, and they must be scrupulously and delicately adhered to by every physician who practices the obstetric art. Failing to do this is to shoulder an awful responsibility, and the consequences of such neglect would be indefensible either in a court of morals or law.

One of the largest Maternities of the land presents a record of nearly 600 deliveries without a death, and it is safe to say that such a splendid showing would be impossible, except for the rigid discipline that is there enforced by a master who knows no law not based upon that simple and divine word—cleanliness, and in whose wards dirt and noisome stenches are ever and forever strangers.

This theme would permit of much elaboration were the time and occasion propitious, but enough has been said to accomplish the purpose in view, viz.: to call attention to a well-known though oft neglected subject, whose principles are not, I fear me, as rigidly carried out in private practice as they should be.

THE TRACTION FORCEPS.

A few years ago, when Professor Tarnier first introduced the forceps that bears his name to the medical world, the impression conveyed to the majority of obstetricians was not a favorable one. It is true that here and there among men of acknowledged skill the instrument was recognized as one of merit, and it was by a few such put into practical use; but the more general verdict was one of disapproval. The argument was that the instrument was cumbrous if not clumsy; that it could be skilfully applied and made to do efficient work only by an expert who had been specially trained in its complicated technique; and, finally, that it was more than all a dangerous instrument, not needed to facilitate delivery—an altogether superfluous addition to an already overstocked armamentarium. Now, after a decade has passed and the instrument has undergone some modification, though still retaining its essential principles, this verdict is about to be, or I might say has been, reversed in all its counts and specifications.

Obstetricians of the most extended experience, notably teachers and those having service in large Maternities, are almost unanimous in their praises of the instrument, especially for the high forceps operation. It enables the operator to seize the head when high up and only partially engaged at

the brim, or in contracted pelves, and to accomplish delivery through traction made in the direction of the axis of the brim, where this were impossible with the classic forceps. The duration of labor is thus materially shortened, with a resultant great saving of both mothers and children. But there is another class of cases in which this instrument is made serviceable, though where it is less frequently employed. I refer to cases of impaction of the head in the pelvic basin with uterine inertia as a concomitant. Here its good offices are made apparent in a minimum expenditure of applied force, and a corresponding economic conserving of strength to both mother and operator.

But all this will be more adequately set forth in a paper by my associate in the administration of the affairs of the Section, whose nimbler wit and greater erudition will, I am sure, entertain and instruct you far beyond my feeble capacity in either direction. I therefore forego further remarks upon this ingenious and useful instrument and its special field of application.

ADVANCEMENTS IN GYNECOLOGY.

It would be interesting to treat upon the rise and fall of craniotomy, the advance of the Cæsarean section, the amputation of the pregnant womb, and many other important questions that are among recent modifications of the practice of operative obstetrics, but the flight of time warns me that I must hasten on to the consideration of a few points in the second department of our Section.

The recent advancements in the gynecological field have been many and substantial. This is true whether in new methods adopted that give promise of great gain, or of former procedures overthrown that have not stood the test of experience.

The cancerous uterus, that has been for so long a period considered the *bête noir* of surgical art, seems about to be reclaimed to the realm of curability through a legitimate surgical procedure. In vaginal hysterectomy there appears to be an avenue of relief from the ravages of this hitherto hopeless disease, provided, of course, the operation is made in suitable cases—those in which the uterine organ only is involved; for it is acknowledged to be hopeless to proceed if there is circumjacent infiltration. The published reports are such as to carry the conviction that this operation has become established on a basis of legitimacy, for it has been able to show results that no other method can thus far claim. It may not yet be all that is desired, but with the improved technique and the multiplied experience of operators in almost every city in the land, there is promise of enough annual cures to win a constantly increasing favor for the method, and to neutralize if not silence adverse criticism.

Without wishing to anticipate the opinions that will be advanced in the papers to be read here to-day on the subject, it will, nevertheless, appear not improper to say that the sum of the whole case viewed from its various standpoints may be fairly stated thus: that whatever the future may bring forth, the operation of the present for cancer of the uterus, whether it be carcinoma of the body or neck, or epithelioma of the cervix, is vaginal total extirpation of the organ.

ELECTRICITY IN THE DISEASES OF WOMEN.

The treatment of the diseases of women by electricity has attracted considerable attention of late, and is manifestly a subject that would appear to justify remark at this time. Georges Apostoli, of Paris, has probably done more than any other man to popularize the agent in this particular field, and it is not uncommon to hear of pilgrimages to his clinic for the purpose of observing his methods, if not for a study of his art. Apostoli's published results are such as to challenge a careful analysis of his cases and a thorough investigation of his methods; but this is neither the time nor place for such extended comment as these would involve.

Paraphrasing a Grant Allenism, it may be asserted that electricity, like evolution, "is now in the air." Everybody talks about it, believes he knows all about it, and discusses it as glibly in his everyday conversation as he discusses the points of race-horses he has never seen, or the superiority of his favorite baseball club, whose members he does not know and whose skill he has never witnessed.

A number of prominent names in Europe and America are constantly quoted by enthusiasts as followers or supporters of Apostoli and his electro-therapeutics, or as authority for the application of electricity to almost every disease that may invade the sexual tract of woman. On the other hand, a large number of equally prominent names may be cited of those who have tried electricity in various forms and under multifarious conditions for like diseases, and as having either abandoned the remedy as worthless or limited its use from disappointment in its results. If judged by this standard one would say with much reason, that the weight of reliable opinion was against such wholesale and indiscriminate use of this agent in this field as its enthusiasts would demand for it.

Laying aside the many minor uses of electricity advocated in society papers, and by magazine writers who in numerous instances have apparently boldly hastened to make known through the medium of the medical press their wonderful feats with an agent they could neither define nor describe, let us examine for a moment its status in the two particular diseases in which its great-

est triumphs are claimed. I refer, of course, to uterine myomata and ectopic pregnancy.

In the treatment of fibroids it is alleged that under a current varying from 15 to 280 milliampères the growth is arrested, the hæmorrhage stopped, the pain abated, and the tumor finally made to disappear by absorption. Certainly nothing can be more satisfactory than such results, no matter by what method of treatment obtained. But when we hear of a patient so cured (?) falling into the hands of another practitioner who finds the tumor still menacing her health and comfort, not to say life, and that he cures his patient by hysterectomy, it makes us pause; and a skepticism necessarily arises as to the value of the agent, or the correctness of the observations of the electro-therapeutist.

In extra-uterine pregnancy electricity has been employed to destroy the life of the embryo, in the expectation that it would mummify and remain henceforth harmless to the woman. The difficulties that lie in the path of acceptance of this practice are so many to the practical surgeon, it is not strange that we should often find him in opposition to its employment. In the reported successful cases has the diagnosis been clear? Is it true that the fœtal remains will not prove a constant menace to the life of the woman? Is there entire freedom from danger in the employment of the current itself? Does not abdominal section with its present improved technique, afford the surest chance of cure, with the minimum of risk? These are some of the questions the well-trained surgical mind would evolve when asked to abandon a logical principle based on the traditions of artistic skill and clinical experience, for one unstable in application, doubtful in action, uncertain in results, and temporary in relief.

While it is probable that electricity will ultimately be adjudged of some usefulness in gynecological practice, its real place is as yet undetermined, and its true value cannot, therefore, be properly estimated at present. Meanwhile, let us watch carefully, wait patiently, test cautiously, speak gently, and above all adhere tenaciously to the mandate of the Apostle: "Prove all things; hold fast that which is good."

ADDRESS OF THE CHAIRMAN OF THE SECTION OF OPHTHALMOLOGY.

Delivered at the Forty-first Annual Meeting of the American Medical Association, held at Nashville, Tenn., May, 1890.

BY S. C. AYRES, M.D.,
OF CINCINNATI, O.

The Section of Ophthalmology, through its Chairman, welcomes most cordially each and every one of you to-day. Although this is only its second year of independent existence, it does not feel like a child of tender years, but rather like a man of vigor and strength. It points with pride to the programme of last year, and this as substantial evidence of its ability to hold its own with the other and older Sections. The contributions of last year were excellent and of a high order, and your Chairman can emphasize the same in relation to the programme which he has to offer.

There is no question but that there is material enough among those who devote themselves to our specialty to sustain the Section of Ophthalmology with honor and credit. It needs only the coöperation of those interested to make it so attractive that it will yearly call forth the personal observations of its members in a manner that will make its meetings highly interesting and mutually beneficial.

We have met to interchange views on topics of mutual interest, to profit by each other's experience and observations, to enjoy that social intercourse which fosters personal friendship among professional men, and to accept the generous hospitality of our Southern confrères in this the beautiful capital of their State.

It has been charged that the life of a specialist makes him somewhat narrow-minded, as his work in a measure excludes the consideration of other branches. I question the truth of this. It certainly does not prevent him from taking an interest in and enjoying a retrospect of the progress which has been made in the vast field of work now occupied by medicine, surgery and the allied branches. The time was when a physician was expected to know a good deal about everything—in fact he was even expected to know everything; but that day is past.

Owing to new and advanced methods of teaching, our conception of the study of medicine is wholly different now from what it was twenty years ago. The horizon of our knowledge has so widened that we are not content to assume that we can comprehend it all. There is a limit to our ability to study, for time and physical endurance are limited, and we must content ourselves with studying well our own part and comprehending as much as possible of other allied branches. As we look out on a landscape we see clearly and distinctly what is near, but less distinctly what is in the distance. So with our specialty; it is close to our eyes and our heart and we take it all in, but we can still enjoy what surrounds us, although at a greater distance.

We know how much work it takes to keep ourselves up with the advances of the day, and we know full well that other branches are as broad, and as long, and as deep as our own, and we can appreciate the work which our colleagues have to do. From this standpoint—and I hold it is a true one—a specialist should not be narrow-minded; his own work should broaden his views of the fields of work his colleagues are engaged in. The allied

branches have made wonderful progress in the past few years, and we can certainly look at their work with pride and admiration.

We look with wonder on men who now with such confidence open the abdominal cavity and perform operations which not many years ago would have been deemed not only foolhardy, but unjustifiable. In preantiseptic days such operations would have been followed by the most disastrous results; but now—how changed! Statistics prove that these operations are not only justifiable, but positively demanded as diagnostic measures.

We learn of an eminent writer in the East something of the progress of surgery which is simply astounding. In compound fractions of all grades the mortality is only one-half of one per cent., instead of from 25 per cent. to 68 per cent., as it was in years gone by. In ovariotomy Mr. Tait's percentage of loss in his second series of 1,000 cases was only 3.3 per cent., when a loss of 50 per cent. was common twenty-five years ago. Surgeons now remove a portion of the stomach in case of cancer of that organ; sections of the intestines are also removed successfully; kidneys are cut down, calculi removed, and the gland preserved to perform its function; if it cannot do so, it is removed entire; and so with the gall bladder—it is opened, calculi removed, and in case this cannot be done successfully the gall bladder itself is sacrificed. Even the citadel of the mind itself—the brain—is opened and tumors successfully removed, which had been located by long and patient study of its functions. This chapter of progress is so startling that we stand in awe and admiration, and wonder what will next be done.

Are we holding up our end of the line in this march of progress? How can each one add something to advance the good of the whole? Cases of interest fall to the lot of each and every one. Interesting and valuable observations are being made, but do we give our associates the benefit of them? How can we best do it? My answer is, by giving to the journals a prompt report of such cases. It is not necessary that an elaborate paper should be written, nor that the whole literature of the subject should be analyzed; leave that for some one else who has more time than you. With the systematic reports of the progress of ophthalmology which are given at intervals in this country and Europe, and particularly in Nagel's Jahresbericht, your grain of seed will not be lost, but will be preserved in a permanent form and utilized for the best purposes of the profession.

Take the Transactions of the American Ophthalmological Society as the representative body in this country and see how many short papers there are, and how few long ones. A single case is frequently presented, but it is the nucleus of a discussion which brings out the various opinions of those present. Let us, then, bear this in mind and give the profession the benefit of our observations.

To aid us in this, a systematic arrangement of our cases as they come on, with free notes of the various phases through which they pass will assist us immensely.

Dr. James Anderson, in a very interesting and valuable article published in the *Ophthalmic Review* on "Some Ocular and Nervous Affections in Diabetes and Allied Conditions," says: "I think it the best and most hopeful feature in ophthalmology that it has relations, closer and more remote, with every branch of surgery and medicine."

The intimate relationship between ophthalmology and general medicine and neurology is recognized by all. The more cerebral and spinal diseases are studied, the more is this appreciated. At the present time every neurologist must be familiar with the alterations in the optic nerve, the influence of the paresis or paralysis of the ocular muscles, and the influences of errors of refraction on headaches and various subjective symptoms which are erroneously attributed to other organs.

Dr. J. Hughlings Jackson was last year elected President of the Ophthalmological Society of the United Kingdom. In his introductory address he says that he began his career in an ophthalmic hospital, and he thinks it the luckiest thing in his medical life. He there obtained lessons on exact observation which he could not have obtained in any other branch. He says that twenty-three years ago he wrote as follows: "Until physicians work at the muscular disorders of various convulsive seizures as carefully as ophthalmic surgeons do at paralysis of the ocular muscles, our knowledge of convulsions will not advance in an orderly way." This seems almost prophetic. He has done much to clear up many obscure points in diagnosis of the pathology of cerebral and spinal diseases.

Look at the manner in which convulsive seizures of a muscle or a set of muscles on a limb or of the entire body have been studied. These phenomena have been investigated with reference to the special portion of the brain which was involved, and how grand has been the outcome. Portions of the brain presiding over certain functions are now quite clearly mapped out, and still the work goes on.

Last year we had excellent suggestions on the discussion of ophthalmic subjects, and valuable hints were given. To carry out this most desirable work, how great an aid would a classified register be, where our cases were so arranged that we could at once refer to any particular subject.

When we wish to investigate a point we naturally turn to the statistics which have been published. What a satisfaction it is to find clear and

convincing light thrown on a point which was in dispute. We feel thankful toward those who have been so painstaking as to collate their cases and the results, and so tabulate them that we can make use of them. To whom are we indebted for these statistics? Public institutions, hospitals, infirmaries, etc., are expected to publish these cases; but do physicians, surgeons, oculists, etc., collect their cases and so tabulate them that they could refer to them at any time? I fancy not. Last year at Newport we had a book for the registration of cases presented to us as a sample book of its kind, and it presented many excellent points. It was shown how easily one could refer to any class of diseases and at once record the number treated, results, complications, etc. How many oculists keep such a record, or have kept one for years past?

I think that if cases were classified as they come along one would derive much more pleasure in looking over his case book at the end of the year. He would also be better able to draw conclusions from his experience.

Many interesting cases fade from our memory as new ones crowd on with fresh points of interest. We have indistinct recollections of them, but cannot recall the name, nor the exact date; and so we move on, leaving much behind us that we ought to have preserved in a shape that we could refer to it at any time. A classified register would enable us to refer to our cases at a glance and collate and utilize them. We would in this way preserve the valuable ones and be able to sift the ordinary and uninteresting ones from those we wished to preserve.

A review of the progress of ophthalmology will compare favorably with that of any other branch of medicine. The new, or rather old, operation of simple extraction is gaining in favor. Statistics are not yet extensive enough to prove its true value, but it seems to me that it is bound to supersede the modified linear extraction of Graefe, and show much superior results. Men educated in the Graefe school are loath to give up a favorite procedure, but such statistics as Knapp has furnished will prove an unanswerable argument to any objections.

The eye as associated with, or involving renal, cerebral, and spinal diseases, and all reflex symptoms of internal organs, has been studied with renewed care. The intimate relationship between these diseases and the eye, is so generally acknowledged that this point no longer needs an argument. We are fortunately able to act as guides to show our confrères through places which otherwise would be dark without the aid of the skilled ophthalmologist.

The study of the errors of refraction is receiving, I may say, universal attention. Its importance grows as it is better appreciated by the profession as well as by parents and teachers. The relief afforded by the careful and accurate adjustment of lenses is incalculable, and as accurate methods are adopted, the results of refraction work are bound to be more and more satisfactory.

This is becoming the most important as well as the most interesting branch of our specialty. In connection with this the question of strabismus comes up, and it is, indeed, most satisfactory to know that it is now receiving intelligent and rational treatment. The results of correcting the underlying error of refraction are most satisfactory, and the necessity for making advancement operations to correct divergence after tenotomy of the internus will seldom ever occur.

Antiseptic precautions, before and after operations on the eye, are now universally adopted, and the results are very gratifying. They will grow in importance as ophthalmic surgery advances. The ophthalmic journals, foreign and domestic, and the proceedings of the ophthalmological societies abound in rich results of the researches and experience of the most eminent men in our specialty. The pens of such men abroad as Alfred Graefe, Hugo Magnus, Van Hippel, Deutschman, Landolt, DeWecker, Leber, Schweiger, Hirschberg, Hutchinson, Nettleship, and a host of others abroad, as well as Knapp, Gruening, Noyes, Kipp, Williams, Bull, Wadsworth, Theobald, Stevens, Roosa, Risley, Harlan, Alt, Chisolm, and many others in our own country, are active in giving to the profession the results of their labors. We have thus each year a mass of rich experience presented which is of inestimable value.

Death has claimed two eminent men during the past year, Jacobson, and Donders. The latter by his genius and profound study worked up the subject of errors of refraction from a theoretical and mathematical standpoint to a practical standpoint, and has left a monument to his name which will be more enduring than a shaft of marble or granite.

This year has been productive of two new and valuable text-books, one by Dr. Geo. A. Berry, of Edinburgh, and the other by Dr. Henry D. Noyes, of New York. Since the book written by Wells, of London, several years ago, we have not had any general text-book written in the English language, but have depended principally upon the translations of the works of our German and French confrères. While these are very good, yet, we welcome with pleasure these two books written in the English language. They are certainly in advance in all respects of any works hitherto published, and are monuments of earnest, faithful work, which reflect great credit on their respective authors.

In order to give a practical turn to my paper, I will say a few words in relation to the topical use of bichloride of mercury in the treatment of

ocular diseases. For the past year I have used it a great deal. It is not a new remedy, but a very old one. If you will consult the oldest book you have on diseases of the eye, you will see that its use is recommended there. It gave place to other and newer remedies, but now in the light of antiseptic investigation we go back to our old friend, and find it one of the most reliable agents we can command. It is a powerful remedy, and must be used with care and discrimination. And right here comes the point of greatest importance: It has generally been used in two strong solutions, and the end to be accomplished has been defeated by this fact. In weaker solutions it acts kindly, surely, and with very slight tendency to excite relapse.

In granular lids I have used it in a good many severe cases, and I have tested it by carefully excluding other well known remedies, and have been much pleased with its effects. In severe cases I used it 1-500, brushing it on the lids, and then washing it off. I found this too strong for regular treatment, the eyes not tolerating it well; I fell into the habit of using it 1-2,000, and found that this did better and only exceptionally caused any unfavorable effect. Occasionally I would use the stronger solution mentioned, but relied on the weaker one. It is not painful, and patients recover from it more quickly than from the use of the crystal of copper or from the ordinary solutions of silver nitrate.

In severe acute catarrhal conjunctivitis its effects were excellent. It was generally ordered in solutions of 1-3,000 or 1-4,000, and used three times a day, and clothes moistened with it were placed over the closed eye-lids. In phlyctenular conjunctivitis and keratitis it seemed to meet every demand required and gave excellent results. Under its influence the phlycten would disappear rapidly, and it seemed to me it prevented the development of new ones.

I have injected it frequently in blenorrhœa of the tear sac and with the most satisfactory results. In purulent ophthalmia it is questionable whether it is more valuable than our old stand-by silver nitrate. There is an objection to it which we must bear in mind, especially where we order it in large quantities, that it is poisonous, and if taken internally might produce dangerous and even fatal symptoms. But the same thing can be said of atropine. The patient should be warned of the danger, and the bottle properly marked. It is a remedy which is bound to meet with increased favor, as is more extensively used in solutions which are suited to the conditions of the eye. The use of the sublimate solution is right in the line of antiseptic treatment, and is worthy of a thorough and unbiased investigation. I hope that its use will receive that intelligent and discriminating consideration which it deserves.

Allow me gentlemen, in conclusion, to express my unqualified confidence in the future success of our Section, and to thank you for your generous and valuable contributions, and to express my high appreciation of the honor you have conferred on me as its chairman.

ADDRESS TO THE SECTION OF DENTAL AND ORAL SURGERY.

Delivered at the Forty-first Annual Meeting of the American Medical Association, at Nashville, Tenn., May 20, 1890.

BY JACOB L. WILLIAMS, M.D.,
OF BOSTON, MASS.
CHAIRMAN OF THE SECTION.

On a brief review of recent advancements in matters pertaining to this Section, we may surely say that there has been very substantial progress during the past year.

Mention should be made of laborious and successful researches on the origin and correction of oral deformities, which have added much to our supply of positive knowledge.

The study of antiseptics has been zealously pursued, further demonstrating their properties, not only as antiseptic in various degrees, but also their qualities as irritant or non-irritant, and as coagulating or non-coagulating.

Attention has been given, and knowledge has been gained in regard to the effects of naso-pharyngeal growths on the form of the mouth, and the perversion of its functions, often to the injury of general health.

The study of special histology has given us positive evidence of some things previously suspected to exist, and pending researches promise new discoveries.

The science of chemistry has continued to lend its aid. And the esthetics of practice have had increased attention given to them. In regard to professional ethics, it may be said that there is still room for further advancement.

But of greatest and most fundamental importance, I think, we may regard the increasing devotion to the consideration and study of the laws of health and disease, on which must be based all intelligent practice in any branch of the healing art.

In a field devoted to agriculture there may be various departments, some for grains, some for fruits, some for flowers; but all must be governed by the laws of vegetable growth and thrift. A disregard of those laws, though accompanied by the most elaborate or ingenious agricultural implements, used by most skilful hands, will surely not result in the largest degree of success. So with the healing art; whoever is best prepared with knowledge of the laws of life, health, and disease, and their relations to professional practice, will find his trained skill the most successful.

It is to be hoped that, in the colleges and schools, increased time and attention will be given to the study of these fundamental principles.

It should not be forgotten that the healing art, though in some of its branches bringing mechanical skill and chemical knowledge to its aid, is itself the beneficent purpose or substance of practice; the design of surgery not being for mechanical display, nor of medicine for chemical demonstrations.

Hippocrates said, "In no one thing does mortal man more resemble the immortal gods, than in giving health to man." And so far as mechanics and chemistry are made therapeutic and prophylactic aids in securing health to mankind, in so far do they become ennobled beyond their ordinary application to "inanimate things."

In earlier years there were only a few qualified practitioners who devoted their knowledge and skill to the treatment of the whole oral cavity, while the larger number gave their attention simply to the teeth; and so the specialty was called "dentistry."

But at this day, when knowledge of the principles of medicine and surgery is more general, and more commonly made available in the treatment of the whole oral cavity, and with reference to its influence on the health of the system, the old term seems too limited. And what now would be a more proper and comprehensive name for the specialty so practiced, than the word *Oristry?*

It is gratifying to know of an increasing general sentiment or principle, pervading this as well as general practice, which perhaps cannot be better expressed than in the line of our poet Holmes, when he wrote, as the motto of our profession, "Our duty is to save."[1]

Every practitioner knows that he is bound in honor to *do his best* for the patient; and the laws of the land hold him to that duty.

If a case for special practice comes to him, and a competent specialist is available, he naturally feels that he is doing his best by referring the patient to the specialist. But if such special treatment is unattainable, he is bound in honor and by the common law to do all he can to save life or limb or member of the patient.

In the variety of legislation in different States, two, at least, recognize this obligation in their statutes. But what shall we say of some State enactments that contravene the great purpose of all humane and proper practice? and assume to prohibit a physician from doing anything in a specialty except to *destroy* a member or organ of the human body; for doing which, also, he, as well as a specialist, may become legally liable for damages.

Special statutes cannot properly prohibit a physician or surgeon from *doing his best* for the benefit of a patient, whatever may be the ailment.

[1] "The Two Armies," by Dr. O. W. Holmes.

We have the satisfaction of knowing that this Section will be ably represented at the International Congress at Berlin by several of its members of well-known erudition.

Mt. Vernon St., Boston, Mass.

MEDICAL PROGRESS.

THE CAUSES OF FAILURE IN THE TREATMENT OF UTERINE FIBROMATA BY APOSTOLI'S METHOD.—DR. APOSTOLI in a recent communication to the *Gazette de Gynécologie*, takes occasion to explain some of the causes of failure in his method of treating uterine fibroids. He emphasized the statement which he has often made, that his method never aims at a radical cure of all cases, which he says is rather the exception than the rule, but it does aim at the symptomatic cure of the patients, with concomitant, though often limited reduction in the size of the tumors. The causes of failures, he says, may be summarized under three heads: causes depending upon the operator, upon the patient, and upon the treatment. As regards the operator, he finds that failure depends largely upon inexperience in gynecology, lack of operative dexterity, and complete ignorance of physical laws. The capital error consists in mistaking a cyst of the ovary or a tumor of the Fallopian tube for a fibroma, and applying a mode of treatment which is contra-indicated.

Regarding the application of the treatment he finds the following sources of error: A current too feeble, a current too intense, too frequent repetition of the séances, or too long a continuation of the same, absence of antiseptic precautions, insufficient localization of the current, especially in fungous and hæmorrhagic endometritis associated with fibromata, failure to make galvano-punctures, and finally a too early abandonment of the treatment.

As regards the patient herself the causes of failure are not less important. It is important to consider the character, seat and topography of the tumor. In general, it may be said, that other things being equal the effects produced will be greater when the tumor is more completely interstitial and *vice versa*. Soft fibromata are much more amenable to treatment than the hard ones, although whatever the variety may be, electrical treatment sufficiently long continued will produce positive anatomical and symptomatical results. Another cause of failure in the treatment of fibromata regards the failure to recognize lesions of the appendages of various sorts, which under some circumstances may be a cause of permanent congestion and uterine hæmorrhage, and under others a cause of peritoneal inflammation. These are the cases of pyo-

salpingitis or suppurating tumors of the Fallopian tube which partly escape the action of the continuous current applied to the uterus, but which are amenable in many instances to galvano-puncture applied with a view to making an artificial opening with vaginal drainage. In these cases we now have an explanation only lately recognized, of the cases of sudden death following a simple examination, the introduction of a speculum or some trivial gynecological manœuvre. In these cases there is rupture of a suppurating cyst of the appendages with discharge of pus into the peritoneum, producing a violent peritonitis.

Every collection of pus in the pelvic basin contra-indicates intra-uterine galvano-cautery of great strength; the first indication and the most urgent one, is to evacuate the pus; vaginal galvano-puncture in the cul-de-sac serves the double purpose of draining the pocket through an artificial opening, and aiding resolution by the trophic action of the current. In cases of doubt where exploration is insufficient or incomplete what means do we possess of confirming our diagnosis and justifying our intervention? The surest and most valuable is the thermometer. If after a single intra-uterine application of the method in a case believed to be simple, fever or pain is manifested and does not readily yield to treatment, if the temperature remains high (39° or 39.5°), it is necessary to exercise caution, and in all cases a temporary or complete abandonment of intra-uterine treatment becomes necessary. Another examination under chloroform is required, when at the side of the fibroma a tumor of the tube heretofore unrecognized will often be found. Under these circumstances two alterations present: the tumor may be near the vagina and consequently accessible to galvano-puncture and evacuation—which should be secured at once—or it may be too high up for vaginal treatment, when laparotomy becomes necessary. Finally there is a source of failure, the responsibility of which falls upon the patient *id est*, the neglect to observe absolute repose for from one to several hours after every intra-uterine treatment. The infringement of the regulation may provoke serious consequences, such as peri-uterine phlegmon; the physician cannot be too insistent upon this point, especially in cases where there is no painful reaction from the treatment.

CHLORIDE OF ZINC FOR ENDOMETRITIS.—POLAILLON reports on the results of his experience in the use of chloride of zinc in the treatment of endometritis. The remedy is employed in the form of bacilli composed of equal parts of flour and zinc chloride; these vary in size according to the capacity of the uterine canal, but are generally from 2 to 5 millimetres in thickness. The bacillus is held in place by a vaginal tampon. An eschar is produced in a few hours, generally without much pain, and always without febrile reaction. The tampon is removed on the second day, and an antiseptic douche is given. On the third and fourth days the remains of the bacillus and the necrosed tissues are removed, after which the patient is kept quiet for a few days. A single application of the bacillus generally suffices to produce a cure. By the fifteenth or sixteenth day after the application the uterus regains its normal condition; if after this time the secretions continue to appear a second cauterization is practiced. The author finds abundant reason to be satisfied with this plan of treatment, and lays stress upon the various advantages obtained, thus no chloroform and no preliminary treatment is required; there is no danger involved in the treatment and a cure is obtained in most cases.

POISONING FROM SUBLIMATE DOUCHES.—M. CRÉQUY reports a case of abortion with retention of the placenta (the os uteri being closed) in which he used vaginal douches of sublimate 1–2,000) three times a day for two days. The placenta was then discharged and a single intra-uterine douche was given with a double canula. Vaginal douches were then resumed as before, and at the end of two days the patient was seized with colic diarrhœa, vomiting and an intense stomatitis, causing sloughing of the cheeks. For several days the symptoms were grave, particularly that of anuria, which lasted three days, the patient finally making a good recovery. The writer adds that he has observed that sublimate disappears almost instantly from solutions when poured into metallic vessels, or when transferred by means of spoons, etc., from one vessel to another. It is, therefore, necessary to avoid the use of metallic irrigators, which retain the greater portion of the salt, allowing the water to escape almost pure, which, indeed, may possibly be one reason for the rarity of poisoning from sublimate solutions.—*La Sem. Méd.*

DIPHTHERIA AND TYPHOID FEVER.—At a recent meeting of the Berlin Medical Society PROF. VIRCHOW exhibited curves representing the mortality in Berlin from diphtheria and typhoid fever for the years 1883–1888. These curves showed that diphtheria has been much less prevalent of late years, although the mortality has not greatly varied. The greatest frequency of the disease was between the months of October and January. The curves also showed that the epidemic of typhoid fever which occurred in 1888 was especially active in those quarters of the city which are unprovided with water pipes, which goes to prove that the bacillus of Eberth may be transported by the atmosphere.—*La Sem. Méd.*

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LONDON OFFICE, 57 AND 59 LUDGATE HILL.

SATURDAY, MAY 31, 1890.

THE FORTY-FIRST ANNUAL MEETING.

The suburbs of Nashville are proverbial for their beauty, and the city itself throbs with the impulses of a vigorous life. The sanitary conditions are so perfected that it hardly has a rival in the matter of health. It is claimed, indeed, that mortuary statistics are of little value here for the reason that they are so meagre. We are in Nashville at the hour of its most beautiful adornment. Foliage and flowers of exquisite beauty meet us at every hand. The proverbial hospitality of its people has never been overstated, and it seems never to wane.

There is a large attendance at the annual meeting. Many Sections not hitherto specially interested are largely represented. This is well! for once that interest awakened, permanent relationship with the Association is very sure to follow. It is to be hoped that the physicians not only of Tennessee but of the adjacent States are to be more fully identified with this National organization. We are confident that it will receive an added impulse and a renewal of its vigor from the accessions which are being made at Nashville.

The first morning session was held at the Vendome. Every seat on the main floor was occupied and large numbers of ladies and gentlemen were in the galleries. The event of the morning was the President's Address by PROF. E. M. MOORE, M.D., of Rochester, N. Y. It is but simple justice to say that he was at his best! In his Address, which will be found in last week's JOURNAL, he rapidly sketches the National legislation which has been had in matters of sanitation from the inception to the present hour. He paid a most deserved tribute to the work of State Boards of Health, to the Marine-Hospital Service, and gave with emphasis his conviction that the hour was at hand when a distinct Department of Sanitation should be created. He dwells very fully upon what has been done and what should be done in the matter of food-inspection, and the needs of Governmental surveillance of the contagious diseases which imperil our domestic animals. His Address gives strong commendation of the work already done and as strongly urges a more perfect completion in the future.

EDITORIAL NOTES.

INTERNATIONAL MEDICAL CONGRESS. — *The Provincial Medical Journal* says: "The time for the International Medical Congress is drawing near, and arrangements are now being made with various companies for transfer. We had a very pleasant party to America, and we should be pleased to hear from those who went to America, and others, so as to form a special contingent to Berlin. This Congress promises to be well attended, and probably 5,000 medical men will be present. From what we hear the Congress will be one of great scientific interest, and all the arrangements will be admirably carried out."

DEATH OF DR. W. H. BYFORD.—We regret to have to chronicle the death of Dr. Wm. Heath Byford, of Chicago, the eminent gynecologist, who succumbed to an attack of angina pectoris after an illness of only two hours. Dr. Byford was born in 1817 and was 73 years of age. He began practice in 1838; from 1850 to 1854 he held a professorship in the Evansville Medical College. In 1857 he was elected to the chair of obstetrics at Rush Medical College. From the foundation of the Chicago Medical College in 1859 to 1880 he filled the chair of gynecology in that institution, and from 1880 till his death he held the same chair at Rush. He was the most active mover in the organization of the Woman's Medical College established in 1869, and has ever since been its president and one of its professors. Dr. Byford was a member of all the leading medical associations of the country. He held the vice-presidency for a time of the American Medical Association, and was president of the Ameri-

can Gynecological Society. Besides the two professorships he held, Dr. Byford was the Surgeon-in-Chief at the Woman's Hospital on the south side, and consulting physician at the Hospital for Women and Children on the west side. In addition he was connected more or less closely with other hospitals and dispensaries. He was a frequent and able contributor to the medical press, and for four years was the editor of the *Medical Journal and Examiner*. In the more substantial forms of authorship more than one of his works is used as a text-book in medical colleges.

THE NATIONAL ASSOCIATION OF MEDICAL COLLEGES.—The Conference of Medical College Delegates held at Nashville on the 22d inst., has resulted in the formation of an association with the above title, the object being to secure needed reforms in the system of medical education. The following officers were elected: President, N. S. Davis, M.D., LL.D., Chicago, ex-president of the last International Medical Congress; secretary and treasurer, Perry H. Millard, M.D., St. Paul, dean of the Department of Medicine of the University of Minnesota.

CHICAGO POLICLINIC.—The names of Drs. F. C. Hotz and G. Füterer have been added to the Faculty of the Chicago Policlinic.

MEDICAL SOCIETY OF NEW JERSEY.—The one hundred and twenty-fourth annual meeting of this Society will be held in the Heath House, Schooley's Mountain, on June 10 and 11, commencing at 4 P. M. on Tuesday the 10th. Committee on Organization will meet in the drawing-room at 3 o'clock P. M. Delegates are requested to present their credentials at that time. All members of district societies not in arrears to this society are entitled to seats as corresponding members, and when they report themselves to the Secretary their names shall be entered on the minutes. Members who desire to present voluntary papers or reports of cases should communicate by letter with Dr. H. R. Baldwin, New Brunswick, Chairman of Business Committee.

THE RUSH MONUMENT.—The report of the Chairman of the Rush Monument Committee to the meeting of the American Medical Association showed that responses to the appeal for aid to build the monument had not been liberal. It was hoped, however, that by personal applications sufficient funds would be raised to lay the corner-stone of the monument at the opening ceremonies of the Columbia Quadri-Centennial in Washington.

MEDICAL SOCIETY OF THE STATE OF PENNSYLVANIA.—Arrangements have been made for exhibits at the meeting of the Pennsylvania State Medical Society. Exhibits will be in Grand Central Rink, a few doors from the Bijou Theatre, where the meetings will be held.

THE SECTION OF MEDICAL JURISPRUDENCE of the American Medical Association will hereafter be known as the Section of Neurology and Medical Jurisprudence.

OHIO STATE MEDICAL SOCIETY.—The forty-fifth annual meeting of this Society will be held at Columbus, O., from June 4 to 6, 1890. The sessions will be held in the Auditorium of the Board of Trade Building, East Broad Street, near High Street. First session at 2 P.M., Wednesday, June 4. Reduced rates may be obtained on all railroads on the following conditions: Each person must purchase a first-class ticket to Columbus; he must obtain from the ticket agent a certificate of such purchase, which agents are instructed to furnish on request; he must have this certificate signed by the Secretary at the meeting. On presentation of this certificate to ticket agents in Columbus, they are instructed to sell return tickets at one-third the highest limited fare. Tickets should not be purchased more than three days prior to the meeting. Tickets are good for three days after the meeting, and are not transferable. Return tickets are limited to continuous passage. If through tickets cannot be procured at the starting point, purchase ticket to most convenient point where they can be procured, and buy ticket and get certificate from ticket agent there. No refund of fare will be made on any account whatever because of failure to obtain certificate.

A POLICLINIC has been opened in Paris.

PROF. GOTTSTEIN.—The honorary title of "Professor" has been conferred on Dr. Gottstein, of Breslau, who, though he has for many years been recognized as one of the foremost laryngologists in Germany, has hitherto had no higher rank in the teaching hierarchy than Privat Docent.

AMERICAN MEDICAL ASSOCIATION.

Forty-first Annual Meeting, held at Nashville, Tenn., May 20-24, 1890.

GENERAL SESSION.—FIRST DAY.

The Forty-first Annual Session of the Association was held at Nashville, Tenn., at the Vendome, Church St., Tuesday, May 20, at 11 A.M. The President, Dr. E. M. Moore, of New York; Vice-President Dr. Thos. B. Evans, of Maryland; the Permanent Secretary, Dr. Wm. B. Atkinson, of Pennsylvania; Assistant Secretary, Dr. G. C. Savage, of Tennessee; Librarian, Dr. C. H. A. Kleinschmidt, of District of Columbia; and Treasurer, Dr. R. J. Dunglison, were present.

The meeting was called to order by Dr. W. T. Briggs, Chairman Committee of Arrangements.

Prayer was offered by Rev. Jerry Witherspoon.

Dr. Briggs welcomed the members on behalf of the profession of the State.

His Excellency, R. L. Taylor, Governor of Tennessee, welcomed them on the part of the State, and the Hon. P. C. McCarver, Mayor of Nashville, on the part of the city.

The reading of the list as registered was postponed.

Dr. Briggs announced the programme and invitations.

Letters of regret were read from Dr. W. A. Phillips, of the Judiciary Council, and Dr. R. Battey, of Ga.

Vice-President Evans took the Chair, when the President delivered the *Annual Address* (see page 737). On motion of Dr. Brodie, seconded by Dr. Grissom, of N. C., thanks were tendered the President for his able address, and a copy requested for publication.

On motion of Dr. Schenck, of Mo., that part of the address referring to State Medicine was referred to a committee of five to report how it could be carried into execution.

Dr. Atchison, of Tenn., asked the attention of all to the efforts of the ladies in behalf of the Jackson Tomb and Hermitage.

After the announcement of the meeting of the State delegations to select members of the Nominating Committee, the Association adjourned until Wednesday, at 10 A.M.

SECOND DAY.

The Association was called to order at 10 A.M. by the President.

Prayer was offered by Rev. Dr. Winchester.

A number of invitations were announced by the Chairman of the Committe of Arrangements.

The Permanent Secretary called the roll of States and the following were reported as constituting the Committee on Nominations:

Ala., W. H. Sanders; Ark., J. A. Linthicum; Cal., Winslow Anderson; Col., E. B. Carlin; Conn., W. C. Wile; Dak., S. J. Coyne; D. C., R. Reyburn; Fla., J. P. Wall; Ga., T. S. Hopkins; Ill., J. H. Hollister; Ind., G. J. Cook; Ia., D. D. Crouse; Kan., J. E. Minney; Ky., W. H. Wathen; La., J. J. Bland; Me., A. Garcelon; Md., A. A. Friedenwald; Mass., J. L. Williams; Minn., J. H. Murphy; Mich., H. O. Walker; Miss., D. W. Trimble; Mo., W. P. King; N. J., W. Perry Watson; N. Y., H. D. Didama; N. C., Eugene Grissom; Neb., W. M. Knapp; Ohio, E. H. Hyatt; Penn., W. H. Daly; S. C., G. J. Mackin; Tenn., J. B. Murfree; Texas, B. H. Eves; Utah, F. H. Bascom; Vt., C. L. Allen; Va., J. E. Chancellor; W. Va., C. T. Ulrich; Wash., W. T. Willsey; New Mexico, E. L. Stephens; U. S. Army, J. H. Baxter; U. S. Navy, E. Dean; U. S. Marine-Hospital Service, J. B. Hamilton.

On motion of Dr. W. Anderson, the Committee was given leave of absence in order that it might meet at once.

Invitations for the next session to be held in California, Colorado, and Nebraska, were read and referred to this Committee.

On motion of Dr. Callender, the name of the Section on Medical Jurisprudence was changed to the Section on "Neurology and Medical Jurisprudence," *nemo contradicente*.

Dr. W. B. Atkinson asked that the By-laws be changed to permit of the election for each Section of a Vice-Chairman, in addition to a Chairman and Secretary.

Upon this, Dr. J. M. Keller asked action upon his amendment offered two years ago and laid over, repealing the action by which the officers of the Sections were elected by the Sections.

Dr. Culbertson offered a resolution asking for the appointment of a committee of nine to revise the working plan of the Association, to report at the next annual meeting.

On motion of Dr. N. S. Davis, of Ill., the whole matter was laid on the table till the regular order of business had been attended to.

Dr. N. S. Davis then read the *Address on General Medicine* (see page 746).

On motion of Dr. W. Brodie, Mich., the thanks of the Association were tendered Dr. Davis for his able paper, and a copy requested for publication.

The Permanent Secretary read the report of the Rush Monument Committee, for the Chairman, Dr. A. L. Gihon, who was absent.

REPORT OF THE RUSH MONUMENT COMMITTEE.

The recent publication, in THE JOURNAL of the Association of April 26, of the report presented by your committee at your last annual meeting at Newport, R. I., and of the able Address in Medicine, on the same occasion, by the Provost of the University of Pennsylvania on the life and services of Benjamin Rush, establishing his lofty claims upon the profession "as the high-

spirited patriot, the wise and far-seeing reformer and philanthropist, the eloquent teacher and writer, and, above all, as *the founder of scientific medicine in America*," render it scarcely necessary for them to do more than reiterate what was then said, and to ask from every member of the Association the careful perusal of Dr. Pepper's admirable discourse, confident that they will agree upon but one reply to the question with which he concludes his paper: "Is it not our duty, shall it not be our pride, to rear in enduring form a *fitting memorial* of our gratitude?"

Your Committee confess, to considerable disappointment, that their published appeals have thus far met with so little response. The enthusiastic approval of the projected monument at the meetings of the Association has given them every reason to believe that the modest contributions solicited would be promptly, generously and spontaneously given. It was thought, moreover, that the examples of other professions, like those of Science and the Law; of smaller bodies, such as the little community of deaf-mutes, whose statue of their beloved and honored teacher, Gallaudet, was projected, designed, executed and unveiled, since this to Rush was undertaken; of a foreign people, as the Italians, whose monument to their own patriot-physician, Agostino Bertani, was likewise conceived since ours, and now stands completed in Milan, would determine the physicians of this country to show to all Americans that they too had a great man to whom they were proud to render conspicuous honor. The personal friends and admirers of Ricord, in France, are proposing to commemorate him by a statue, as those of Marion Sims are about to do in the United States, but Ricord, and Sims, and McDowell, and Flint, and Gross, and many more of our brilliant and renowned physicians, are commended to us for other than the reasons which make Benjamin Rush an eminently National figure, and as such an especial claimant upon the regard and veneration of men of every branch of our profession, and from every section of our country. Because in his person is exemplified the part a physician of the profoundest professional attainments can fill with distinction in public affairs at their most critical junctures; because, among the grand, heroic personages of the period of the Revolution, of whom Americans entertain such reverential pride, Dr. Benjamin Rush was the peer of them all in intelligence, patriotism, bravery, dignity and executive ability; because, while our Declaration of Independence and our Federal Constitution endure, he, as a signer of the one and an author of the other, is a part of the history of this Republic; for these reasons alone every physician of this age should honor him, and reverently transmit the record of his illustrious services to the generations that are to follow.

The beautiful green Mall at Washington, on which stand the Smithsonian Institution, the National Museum, and that splendid edifice, for which we are indebted to the medical officers of the Army, the Army Medical Museum and National Medical Library, is the appropriate site for the effigies of the pioneers in scientific research in this country. Already the bronze figure of Professor Henry graces this classic ground; soon that of Daguerre and those of Morse and Spencer Baird will follow. Whose face and form but of Rush should stand before that grand storehouse of the labors of the physicians of all time, his own literary works among the choicest treasures on its shelves, his treatise on insanity having for seventy years been the standard authority on that subject in Europe as in his own country?

Should the direct appeal which your Committee has made in the International issue of THE JOURNAL of the Association for May 3, to each of the hundred thousand physicians in the United States, "to send a contribution, however small, immediately to the Treasurer, Dr. DeWitt C. Patterson, of Washington, D. C.," fail to effect its object, it is proposed to make personal application to men, who are known to be in sympathy and accord with this movement, so when the Association next assembles in Washington, as it is hoped it will do coincidently with the opening ceremonies of the Columbian quadricentennial celebration, the corner-stone of the Rush Monument shall then be laid. By this time it may be definitely known whether the memorial shall be the imposing one your Committee have in view, or such humbler testimonial as the money they may then have in hand, shall justify them in obtaining. Your Committee desire that it shall be "a fitting memorial of our gratitude," expresive of the popular appreciation, by as many in number as possible of the members of the profession, of the eminent services of this great physician. When it is recalled how small a contribution from every physician in the United States, would suffice to erect a statue notable among the many notable ones already at the National Capital, it is still hoped that this last appeal may meet with generous response. Whatever be the result, your Committee pledge themselves to devote the sum they may have received, be that however little, to their contemplated purpose of thus commemorating "the greatest physician this country has produced."

Respectfully submitted:

ALBERT L. GIHON, Chairman.
GEORGE H. ROHÉ, Secretary.

Dr. D. W. Patterson, of D. C., Treasurer of the fund, read the report of collections for the fund, amounting to $1,505.69, the expenses being $17.53, leaving $1,488.19 in the fund.

On motion of Dr. J. M. Toner, of D. C., both reports were accepted and ordered to be published in THE JOURNAL.

Dr. P. O. Hooper, of Ark., read the report of the Trustees of THE JOURNAL:

REPORT OF THE BOARD OF TRUSTEES FOR THE PUBLICATION OF THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION FOR THE JOURNAL YEAR ENDING MARCH 31, 1890.

The Trustees for the publication of THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION beg leave to submit this their seventh annual report:

The office of publication has been continued at Chicago since the foundation of THE JOURNAL, although the Trustees have at different times invited competitive bids for its publication in other cities, but always with this uniform result, that it can be issued cheaper in Chicago than elsewhere.

THE JOURNAL, or rather the Association, owns its own plant, which is well equipped for the work it has to do. The printing office consists of type, cases, bindery and all supplies necessary to the publication of THE JOURNAL except the press. The presswork is done under a favorable contract in the same building in which its office is located.

The value of the printing office and office fixtures is estimated at $2,021.26. A present expenditure of about three hundred dollars is required for type which needs renewal.

It will have been observed that THE JOURNAL has been edited for a little over a year by the Committee on Management, under the Trustees, one of whose members has been constituted Supervising Editor.

The weekly issue of THE JOURNAL has been mailed with uniform regularity on the day set for its publication, in good typography and with good paper.

The increase in circulation has been steady, as is shown by the report of the Committee on Management to the Trustees. It has now a weekly issue of 5,100 copies.

The total income of THE JOURNAL from subscribers, advertisers, etc., amounts (for the current year) to $14,154.91. The report of the Treasurer, Dr. R. J. Dunglison, will show the amount in the treasury now on hand.

All of which is respectfully submitted.

J. M. TONER,
P. O. HOOPER,
LEARTUS CONNOR,
W. T. BRIGGS,
ALONZO GARCELON,
I. N. LOVE,
W. W. DAWSON,
JOHN H. HOLLISTER,

On motion of Dr. W. Brodie, of Mich., the report was received and ordered to be published in THE JOURNAL.

Dr. C. Seiler, of Penna., having asked relative to the delay in the publication of some papers read at the last annual meeting, Dr. Hooper replied for the Editorial Committee.

Dr. C. G. Comegys, of Ohio, offered the following resolution:

Resolved, That the President appoint a committee of one from each State now represented at this session of the Association, to consider the report of the managers of THE JOURNAL of the Association, and to recommend, if any, what steps should be taken to enlarge the volume of THE JOURNAL, to strengthen its editorial management, and to widen its circulation, so that it shall be found abundantly in all parts of the Nation and represent the medical progress of the age.

Dr. Comegys, in support of his resolution, said: In offering this resolution I have no thought of disparaging, directly or indirectly, the management of THE JOURNAL now or at any time since the first day of its creation. It was a most important, indeed, an essential undertaking, and has, considering the resources at the command of the managers, been most ably conducted. Its foundation and superstructure have been reared by a wise and energetic Board of Managers. It is impossible to develop any controversy on that subject, and I am sure that the gentlemen who have edited and managed THE JOURNAL are as anxious as any of its supporters to increase its usefulness in any practical manner that can be pointed out. Therefore, in begging the support of members now for the passage of my resolution, I wish distinctly to be understood that its whole object is to ascertain if this great representative body of the true medical profession is desirous to enlarge the capacity of THE JOURNAL so as to make it universally acceptable—indeed, the pride and boast of the profession.

THE JOURNAL, thus far, has been nourished by the love of the Association for its offspring, and has been held up and made as strong as the annual contributions of the members, with advertising profits, could justify; yet, however, it can not stand alone, independent of the Association treasury, like many of our great local journals stand self-supporting; its capital is not abundant and sufficiently substantial for this.

Now, it seems to many of us that the time has come for a great movement to be initiated which shall place THE JOURNAL on such a deep and broad foundation, and give such largeness and increased capacity to its functions, that the annual subscribers gained so liberally at the annual meetings of the Association shall not fall away, but be held to the subscription list by a willing choice, and that the profession at large shall become its patrons.

Many of us believe that the day has dawned in the light of which THE JOURNAL shall lead the

Association, be its formidable and luminous guide and minister, and represent the intelligence, feeling and force of fifty thousand of the most self-sacrificing, cultured, influential and upright men in the United States.

Let us see if, at this auspicious meeting in this fair city of the Southland, a new and irrefragible bond of union shall not be cemented whose whole mission shall display a lofty and imperishable energy for the direction and support of our best humanity.

After discussion by Drs. J. V. Shoemaker, of Penna., and J. M. Keller, of Ark., on motion of the latter the resolution was laid on the table.

Dr. N. S. Davis, of Ill., was on motion permitted to reply to the remarks of Dr. Seiler.

On motion of Dr. Keller, his amendment relative to the selection of the officers by the Committee on Nominations, in place of by the Sections themselves, was called up.

A motion by Dr. Moyer, of Ill., to lay this on the table, was defeated.

A vote on the motion to repeal the action and have the election by the Committee on Nominations was adopted, 72 ayes, 61 nays.

The question being asked if it did not require a vote of three-fourths in favor to make this change, caused some discussion as to whether the amendment was to the By-laws or the Constitution. The President finally decided that the change was a constitutional one and required due notice and a three fourths vote to adopt it.

The following telegram, dated at Chicago, was read from Second Vice-President Kimball: "Am called back from here to Minneapolis. Cannot attend meeting. Wish you all a good time."

The Association then adjourned until Thursday at 10 A. M.

REPORTS OF SECTIONS.

Section of Practice of Medicine, Materia Medica and Physiology.

FIRST DAY.

Meeting called to order by the Chairman, Dr. John H. Musser, of Philadelphia, in the Vendome at 3 P.M.

The Secretary being absent, on motion of Dr. Sawyer, of Ohio, Dr. George Dock, of Galveston, Tex., was elected to fill the vacancy.

The Chairman called attention to the rules governing the proceedings of the Section.

The Chairman then read the *Annual Address*, which will be printed in full at an early date.

Dr. De Saussure, of Charleston, S. C., read a paper on *The Histories of Twenty-two Cases of Filaria Sanguinis Hominis.*

Dr. Lovering, of Ohio, spoke of the similarity between the symptoms as observed by Dr. De Saussure, and those of trichinosis as seen by himself.

Dr. Kelly, of Baltimore, mentioned some cases seen in Baltimore, under the care of Dr. Osler.

Dr. De Saussure, in closing, said all cases so far seen in the North had come from the South.

Several papers on the programme were not read owing to the absence of the authors. Dr. C. H. Shepard, of Brooklyn, N. Y., read a paper on *Rheumatism and its Treatment by the Turkish Bath.* Discussed by Drs. Ulrich, Didama, Cronin and Bailey.

Dr. J. W. Davis read a short paper on the *Use of Calomel in some forms of Chronic Dysentery and Flux*, which was discussed by several members. Adjourned.

SECOND DAY.

Section called to order at 2:30 P. M.

Dr. George Fackler, of Cincinnati, O., read a paper on *Calomel as a Diuretic.*

Dr. Ulrich, of Wheeling, W. Va., gave his testimony as to the diuretic action of calomel.

Dr. Caldwell, of Florida, had used bichloride in the dose of ⅛ gr. t. i. d., along with ammonium chloride, and thought the combination gave better results than calomel, especially in regard to salivation.

Dr. DeSaussure, of South Carolina, said he had used bichloride as a diuretic with good results, and also calomel, but gave the latter in larger doses than the writer of the paper.

Dr. Fackler said that on the whole calomel was least liable to salivate.

Then followed the discussion on the *Continued Fevers of the South*, opened by a paper by Dr. W. W. Johnston, of Washington, D. C., read by the Secretary.

Dr. Wall, of Tampa, Fla., continued (see Dr. Wall's paper), followed by Dr. Happell, of Tennessee, Dr. Shephard, of Tennessee, and Dr. Dock, of Texas (see papers).

Dr. Sears, of Texas, said he had had a large experience with continued malarial fever, cases of which often run into the typhoid state. This he called typho-malarial, somewhat after the analogy of typhoid-pneumonia, etc. He said all patients of his who were treated with quinine recovered. He gave them quinine in doses of one to two ounces during the progress of the disease, and though the fever was not reduced, he attributed the recoveries solely to the drug.

Dr. Van Eman, of Kansas City, said that all the continued fevers seen in his practice had been enteric, as demonstrated by autopsies in fatal cases. He thought two ounces of quinine more likely to kill than cure.

Papers were read on *Specific Treatment of Typhoid Fever*, by Dr. J. H. Van Eman, of Kansas City; *Has Progress Been Made in the Treatment of Typhoid Fever?* by Dr. Happell, of Tennessee; *Treatment of Insomnia and Neuralgia by Butyl*

Chloral Hydrate, by Dr. H. A. Hare, of Philadelphia.

Dr. Crawford, of Illinois, presented a patient showing obscure symptoms, and requested a diagnosis from members of the Section.

The Chairman suggested that the Secretary request a number of members to examine the patient and report.

Dr. J. P. Sawyer, of Cleveland, O., read a paper on *Auto-Intoxication from Nitrogenous Elements of the Food When Taken in Excess.*

The Chairman asked the Section what action it wished to take in regard to the suggestion of Dr. Johnston, viz.: to have a collective investigation of the continued fevers of the South, with a view of establishing their nature.

A motion was made and carried that a committee be appointed by the chair to report next year.

The Chairman appointed as Section Nominating Committee the following: Drs. Vaughan, of Michigan, Chairman; French, of Ohio; De Saussure, of South Carolina; Happell, of Tennessee, and Sawyer, of Ohio.

The Section then adjourned to meet at 2 P. M. on Thursday.

Section of Ophthalmology.

FIRST DAY.

The Section was called to order on Tuesday, at 3 P.M.

The Chairman, Dr. S. C. Ayres, read an excellent address (see page 789.)

Dr. Cheatham, of Louisville, read a paper on *The Use of Jequirity*, in which he advocated the use of powdered jequirity in cases of trachoma with pannus. Several cases thus treated were reported.

Dr. T. E. Murrell, of Little Rock, Ark., read a paper entitled *A Danger in the Use of Jequirity Heretofore Unmentioned*, in which reference was made to two cases in which instillation of jequirity was followed by acute inflammation of the lachrymal sac, which necessitated opening, and afterwards probing had to be done to overcome the stricture.

These papers were discussed by Drs. Post, St. Louis; Bradford, Ky.; Tilley, Chicago; Thompson, Kansas City; Savage, Nashville; Frothingham, Detroit; Dickinson, St. Louis; Scott, Cleveland, O.; Holmes, Cincinnati; Fulton, St. Paul; Smith, and Baker, Cleveland.

Dr. J. E. Sinclair's paper on *Enucleation in Panophthalmitis* was read by title.

Dr. A. R. Baker, of Cleveland, O., read a paper on *Functional Nervous Diseases*, in which he stated that the majority of the cases of muscular asthenopia are due to errors of refraction, and that it should not be forgotten that a certain neurotic element is at the bottom of all the symptoms. This paper was discussed by Drs. Hotz, Chicago; Frothingham, Detroit; Savage, Nashville; Minney, Topeka, Kan.; Price, Nashville; Connor, Detroit; De Schweinitz and Jackson, Philadelphia.

Dr. C. H. Goode, of Cincinnati, read a *Report of Case of Sympathetic Inflammation two weeks after Enucleation of the Injured Eye.* The case was that of a boy who was struck in the eye by a stone. The eye was enucleated on account of the great extent of the traumatism. Two weeks after the operation the patient returned with iritis. V. $\frac{1}{3}\frac{5}{5}$. Atropin used; leeches applied. The condition improved. A relapse took place, but recovery ensued with V. $\frac{1}{3}\frac{5}{5}$, and nothing anomalous in the fundus. This paper was discussed by Drs. Cheatham, Louisville, and Fulton, St. Paul.

Dr. F. C. Hotz, of Chicago, then exhibited a simple and reliable astigmometer. The claims made for the instrument are its simplicity and the quickness with which astigmatism is diagnosticated, and the position of the meridian discovered. This paper was discussed by Dr. Murrell, of Little Rock, Ark.

Dr. Frothingham moved that all ophthalmologists attending the meeting of the Section give their names and address to the Secretary. Carried.

The committee appointed at the Fortieth Meeting by the Ophthalmological Section, with the consent of the General Assembly, to urge the adoption of such measures by the Government in the Census of 1890 as shall contribute more efficiently to the causes of blindness in the United States, reported that after due correspondence, a schedule had been adopted which will be placed in the hands of every physician, which will greatly facilitate the work. The report of this committee will be published in full in THE JOURNAL.

SECOND DAY.

The Section was called to order by the Chairman at 2:30 P.M. The Committee on Nominations reported that they had unanimously agreed on Dr. Leartus Connor, of Detroit, as Chairman, and Dr. T. E. Murrell, of Little Rock, Ark., as Secretary.

Dr. G. E. Schweinitz, of Philadelphia, read a paper on a *Clinical Study of a Series of Cases Exhibiting Slight Macular and Perimacular Changes.* The changes were noted in cases of astigmatism, and were divided into the following groups: 1. Asymmetrical lesion situated in the macular region of the eye presenting the greater error of refraction. 2. Symmetrical macular changes—refractive error. 3. Asymmetrical lesion, situated in the macular region of the eye presenting the smaller error of refraction. 4. Symmetrical macular changes, asymmetrical refractive error; probable influence of constitutional derangement. 5. Slight macular changes—no apparent result if exposed to bright sunlight. This paper was discussed by Drs. Cheatham, Dickenson, Murrell, Randall and Tilley.

Dr. Murrell read a paper on the *Correction of the Smaller Forms of Astigmatism*, in which he strongly advocated the correction of all forms which gave rise to any asthenopic symptoms. Atropine was used in all cases, so as to correct the whole amount of the ametropia. The paper was discussed by Drs. Taylor, Thompson, Randall, Savage, Connor, Hotz, Jackson, Lippincott, Gardiner, Starkey and Frothingham.

Dr. W. T. Montgomery, of Chicago, not being present, the Chairman read his paper on *Progressive Hypermetropic Astigmatism* by title.

Dr. J. Morrison, of Louisville, read a paper on *A Case of Transplantation without Pedicle for Cicatricial Entropium*. The case was one of marked entropium produced by a premature blast. The integument was taken from the arm. The size of the flap was 3½ inches long by 1½ inch wide. The case did very well After three weeks the surface contracted to one-third the original size. Discussed by Drs. Holmes, Starkey and Hotz.

Dr. Edward Jackson, of Philadelphia, read a paper on *Tests of Visual Acuteness and the Standard of Normal Vision*, in which he advocated a more definite and accurate means of testing than the usual test types. Illumination to be reliable must be constant, and a good gas argand burner at about 15 inches from the card was recommended. It was maintained that Snellen's angle of 5° is too large, 4.5° being quite sufficient. A number of test cards made under this angle were exhibited. In order to keep exact records of visual tests a card was exhibited in which the test was a square figure subtending a visual angle of 3′, from one side of which a 1′ square was removed. This paper was discussed by Drs. Starkey and Randall.

Dr. Robert Tilley, of Chicago, read a paper in which a case of *Left Lateral Homonymous Hemianopsia associated with a wound of the Occipito-Parietal Region* was described. The case was that of a man who was struck on the head, walked to his home and fell unconscious and remained so for some time. Eyes normal, left pupil larger than right. V. = fundus, a slight choroidal crescent in field of vision. The line of vision was perfectly vertical except at the point of fixation. The wound was situated on the right side of the head. This paper was discussed by Drs. Schweinitz and Jackson. Dr. Tilley also exhibited an instrument for the rapid measurement of the radius of curvature of lenses.

Dr. C. R. Holmes read a paper on *Hæmorrhage after Cataract Extraction*. The case was one of double black cataract. The first eye was operated and healed normally; the second eye was operated on, operation normal. Two days afterwards hæmorrhage took place. The eye was enucleated six weeks afterwards. Dr. Holmes also read a paper on *The Use of Boracic Acid and Massage in Pannus*. After using this process and remedy for one year he has adopted it entirely. It is rapid and most effectual. Discussed by Drs. Tilley, Hotz and Frothingham.

THIRD DAY.

The Section was called to order by the Chairman at 2:45 P.M. Dr. Jno. Fulton's paper on the *Amblyopia of Strabismus* was read by title.

Dr. R. Alex. Randall read a paper on *The Use of Mydriatics in the Correction of Errors of Refraction*. The correction of small forms of astigmatism was advocated. The use of mydriatics for fitting glasses was strongly advised, and full correction was laid down as the general rule, very few exceptions being admitted. The paper was discussed by Drs. Smith, Chattanooga; Lippincott, Pittsburg; Schweinitz, Philadelphia; and Jackson, Philadelphia.

Dr. Geo. E. Frothingham, of Detroit, read a paper entitled *A Case of Lenticular Astigmatism acquired by the long use of Spectacles having Faulty Position*. Glasses + 0.75 were prescribed for a young man, who afterwards received from an optician + 3 for reading. When examined four years later a myopic astigmatism of 0.50 on the vertical meridian was discovered, which under atropine became hypermetropic astigmatism + 0.50 in horizontal meridian. The change in refraction was attributed to the astigmatism produced by the faulty position of the lens, requiring an irregular contraction of the ciliary muscle to neutralize it, and which became permanent. The paper was discussed by Drs. Jackson, Philadelphia; Tilley, Chicago; Savage, Nashville; and Randall, Philadelphia.

Dr. Thompson, of Kansas City, read a paper describing an easy and reliable way of preserving macroscopical specimens.

Dr. Sinclair, of Nashville, Tenn., reported *A Case of Sarcoma of the Choroid*. The disease was found in a lady. Has had pain in the eye for two years. The lens was opaque. Although Dr. Sinclair suspected tumor he performed iridectomy, giving relief for six weeks. Pains returned and the eye was enucleated. The microscopical examination revealed a small spindle-shape sarcoma of the choroid. Three years have elapsed and there are no symptoms of return of the disease.

Dr. Smith, of Chattanooga, exhibited a case for carrying the ophthalmoscope, its merits being that it occupies but little space and protects the ophthalmoscope.

The Chairman appointed Drs. Frothingham, Jackson and Gardiner on the Committee on Publication.

Dr. Lippincott exhibited an instrument for syringing the anterior chamber.

Dr. Frothingham moved a vote of thanks to the Chairman and Secretary.

Dr. Gardiner moved that Dr. Savage, as mem-

ber of the Entertainment Committee, be requested to convey the thanks of the Section to the Ladies' Committee for the hospitable manner in which they have received the visiting ladies.

The meeting then adjourned.

Section on Diseases of Children.

FIRST DAY.

Meeting called to order at 3:30 P.M., Dr. I. N. Love, Chairman, presiding.

The annual address of the Chairman was by consent postponed until the following day.

On motion of Dr. Latimer, of Maryland, the Committee on Dietetics was invited to coöperate with this Section, and if agreeable to the Committee, to become a part of this Section. Carried unanimously.

Dr. G. Frank Lydston, of Chicago, read a paper entitled, *A Plea for Operative Interference in Peritonitis, with especial reference to Peritonitis of Obscure Origin in Children.* The doctor in his paper deprecated the opium treatment, which he regarded as not only useless but many times positively harmful. He regards peritonitis emphatically as a surgical disease, and there is absolutely no such thing as primary idiopathic peritonitis. He believes that physician and surgeon should treat the cases conjointly, the physician calling on the surgeon only after the failure of medicinal treatment, but soon enough to be of use, citing several cases illustrating his strong position, regarding nearly all forms as subjects for surgical interference. He further observed that children were more liable to inflammation of this membrane by the comparatively heavy weight and lighter supporting ligaments of abdominal viscera, causing heavier impact from concussion.

Dr. H. A. Hare, of Pennsylvania, disagreed with the writer in his sweeping assertions. Paralleled serous inflammation as being amenable to medicinal treatment, and only in septic cases was surgical interference indicated. He referred to Dr. Fitch, of Boston, who reported that out of seventy-two cases, 40 per cent. had recovered by medicinal and only 11 per cent. by surgical means. Believed that saline cathartics should only be used where there was an absolute certainty in the diagnosis, and where there was no weakening or perforation of the intestinal walls. He believes that cold is one of the most common causes of the so-called idiopathic peritonitis.

Dr. Larrabee, of Kentucky, said that while not agreeing with all the deductions contained in the paper, he commended it as calling attention to a most important subject for study.

The prevailing bacterial craze tends to make us timid in operative procedure, and would account for some failures to operate early when indicated. Infantile peritonitis causes many deaths from our failure to recognize it as such in time to treat it. He strongly advocated the use of opium, as borne out by results in his own practice. He had found intraperitoneal inflammation coming from constipation apparently due to the sedentary life of school-children. Early operation was correct, but be sure there was pus.

Dr. Wm. Perry Watson, of New Jersey, liked Dr. Lydston's position, and probably would have the operation performed earlier than heretofore. He believed that operation was called for more frequently in perityphlitis than in acute peritonitis.

Dr. Love, of Missouri, emphasized importance of early diagnosis. Ascertain certainly that there is or is not a history of previous injury. He cited interesting cases of supposed typhoid fever in which the history and autopsy showed peritonitis. He would impress upon parents of children the necessity of close observation after even slight injury, until all possible danger is past.

Dr. E. A. Wood, of Pennsylvania, always gave opium. Never operates until other means are exhausted, and then only when pus is shown to be present, as evinced by threatened pyæmia or septicæmia. Cited a case of a woman in whom the indications called strongly for surgical interference, who got well without operation; another case was treated to the full extent of medicine, and when about to die was saved by timely operation.

Dr. W. D. O'Brien, of Pennsylvania, thinks we are timid in the use of opium in infantile peritonitis. He cited a case of a child in its seventh year with acute peritonitis, in which he ordered morph. sulph. to be administered as often as necessary to keep the child quiet and free from pain. To gain this result the child received 55 grs. (Power & Wightman's) in forty-eight hours, dispensing it himself, and for fear of non-absorption he caused it to be administered in solution.

Dr. Lydston closed the discussion with the statement that he referred more particularly to the so-called idiopathic cases which were actually traumatic. He did not condemn the opium treatment *per se*, but believed it obscured the surgical indications.

Dr. S. Henry Desson, of New York, sent a paper entitled *Therapeutical Value of Antipyrin in Diseases of Children*, which was read by Dr. Wm. Perry Watson. Dr. Desson believes that this is a type of the most valuable remedies of recent introduction. Its action is not only antipyretic, but sedative; useful as an antipyretic only in the pneumonia of children. Most marked success had been shown in the treatment of chorea; here it acts purely as a sedative. In rheumatism he believes its action to be antiseptic. Has found that in pertussis its action is to shorten the duration of the disease.

Dr. Larrabee, of Kentucky, in opening the discussion, stated that he regarded antipyrin as a very dangerous drug, because of its sedative ac-

tion on the heart. A pale countenance, with a high fever, was a contraindication.

Dr. Hare considered the use of antipyretics of this class as uncalled for, as well as dangerous.

Dr. G. W. McNeil, of Pennsylvania, uses antipyrin in cases of pneumonia, for its antipyretic and sedative effects. Had found that when the blueness occurs from its administration, the use of digitalis would prevent this alarming symptom.

The Section adjourned at 6 P. M. to meet on Wednesday at 3 P. M.

SECOND DAY.

In the absence of Dr. Love, on motion, Dr. Larrabee, of Kentucky, was called to the Chair.

The Significance of High Temperature in Children was the title of a paper by Dr. W. A. Stowell, of New York. He called attention to the temperature as influenced by birth, arterial or venous currents, and its variation during day or night, and to many physiological facts bearing on the subject. Thought it was not necessary to use thermometer 15 to 20 minutes at a time. Called attention to many simple ailments giving rise to ephemeral temperatures. Cited cases where there was a very marked variation of temperature. Showed that in certain diseases the temperature varied greatly from accepted standards. Denied that the new antipyretics, such as antifebrin and others of that class, had succeeded, with him, in reducing fever satisfactorily. Finds that they are no better than the older aconite and veratrum. Thinks that temperature may be reduced by proper feeding and stimulants.

Dr. Ephraim Cutter agreed with the author in the matter of feeding, as influencing the temperature kindly.

Dr. Wm. Perry Watson does not always treat a rise of temperature, as he does not consider it as always alarming. He gets at and if possible relieves the cause of the fever, and afterward, if necessary, uses antipyretics to help nature along. Recommended, in intelligent families, the use of the sponge, with cold, hot or tepid water. Carbonic acid drinks, which are given in small quantities and frequent intervals.

Dr. Frank Woodbury, of Pennsylvania, differentiates his cases in high temperature, and believes that in cerebral fevers, the cooling cloths to head should extend over eyes, to prevent reflex symptoms. Upheld Graves' theory of feeding fever by proper diet.

Dr. J. A. Work, of Indiana, applied tepid water to head and had it fanned for an hour or two. He had not lost one out of fifty cases of pneumonia, and believed that diet and attention to the eliminative functions was proper treatment, as proved by his success.

Dr. E. F. Brush, of New York: There is much in expression in temperature. Called attention to some experiences in the rapid rise of the mercury in the rectum. When it rose rapidly after insertion he knew his fever was not going to be dangerous; when it rose slowly he always looked out for serious results. Flushes the bowels with marked success.

Dr. B. H. Boyd, of Indiana, believed that the eliminating processes should be encouraged.

In closing, Dr. Stowell did not wish to be understood as using veratrum in excessive doses. Has found calomel useful in beginning of fevers.

Dr. Larrabee, of Kentucky, said he tried to manage rather than to treat fevers; less medicine the better. Hyperpyrexia should be treated, but not simple pyrexia. The cases of high temperature due to neuroses were best treated by warm pack. Advocated rectal injections with cold water coils to head. A temperature of 104° needed treatment.

The Section then adjourned to the Section of Laryngology and Otology, on Broad street, to listen to the paper and discussion on *Croup and Diphtheria*.

Dr. R. Early read a paper in which he took his audience back to the old authors, who evidently had, but did not always recognize diphtheria. Used ipecac. pot. chlor. and sod. chlorate.

Dr. Daly, of Pennsylvania, advocated the calomel treatment.

Dr. Brush, of New York, gave a history of thirty-three cases of intubation, of which but three recovered. His treatment is to feed them and put them flat on the back without pillows. He feeds them with a nurse bottle very satisfactorily. He believed that diphtheria was essentially septic croup. Did not incline to the idea of bad sewerage being a potent factor in causation.

The Section then returned to their rooms, and the Nominating Committee, through its Chairman, Dr. C. E. Early, reported that Dr. William Perry Watson, of New Jersey, was their choice for Chairman, and Dr. W. R. Hare, of Pennsylvania, for that of Secretary.

The Section then adjourned to meet May 23, at 10 A. M.

Medical Jurisprudence.

FIRST DAY.

A paper by Dr. Norman Kerr, of London, delegate of the British Medical Association, entitled *The Need of a New Criminal Jurisprudence Affecting Inebriety*, was read by Dr. Everts, of College Hill, O. The Secretary, Dr. T. D. Crothers, read a paper on *Some New Medico-Legal Questions Relating to Inebriety*.

The following papers were read by title: *Medico-Legal Significance of Facts Common to Insanity and Inebriety*, by T. L. Wright, Bellefontaine, O.; *The Psycopathic Sequences of Hereditary Alcoholic Entailments*, by Charles H. Hughes, St. Louis, Mo.; *The Medico-Legal Relation of the Physician*

to the Inebriate and Inebriety, by I. N. Quimby, Jersey City, N. J.; after which a general discussion was opened by Dr. Everts. He said the need of a change in the laws relating to the punishment of inebriates was evident. The question of responsibility was a disputed one; still, as medical men, this could be adjusted, and the sense of the community would not be shocked by holding these men responsible. He urged that further legislation was needed, and the profession must aid in this direction.

Dr. Brower, of Chicago, Ill., believed that changes of law must be made in the interests of justice. He related some cases where injustice had followed by failure to realize the actual condition of the inebriate, and expressed a conviction that much of the present confusion in courts would pass away when this subject was better understood.

Dr. Knapp, of Lincoln, Neb., thinks that only punishment would diminish the crime of these cases. He expressed great doubt as to the irresponsibility of persons who commit crime when intoxicated.

Dr. Ingles, of Detroit, believes that the use of alcohol is always followed by brain defects and changes. The question of responsibility is a difficult one, and in most cases the inebriate is not sound.

Dr. Cook, of Oxford, O., is convinced that the inebriate is not always sane, and that great care should be exercised in the question of his mental state at the time of the commission of any act in question.

A general discussion followed, after which a paper was read by Dr. D. R. Brower, of Chicago, on *Medico-Legal Relations of Central Paralysis*. Discussion of this paper was postponed until next day.

SECOND DAY.

The election of officers resulted in Dr. T. D. Crothers, of Hartford, Conn., being elected President, and Dr. H. N. Moyer, of Chicago. Ill., was elected Secretary.

The first paper was read by Dr. William Porter, of Buffalo, N. Y., entitled: *What is the Medico-Legal Status of the Abdominal Surgeon?*

Dr. J. G. Kiernan, of Chicago, Ill., spoke as follows: The only legal question which can be raised, in deciding the questions of responsibility of the abdominal surgeon, is whether he has exerted "due diligence" in the case. But to demonstrate this "due diligence" to a jury requires considerable more than ordinary evidence, since such peculiar influences are brought to bear. By aid of the press a grand jury is induced to indict; it of course hearing one side only. The civil jury is influenced by this finding. If the malpractice blackmailer were required to give bonds it would have a decidedly good effect.

Dr. Moyer said: The question of consent is not the only one involved in these surgical procedures, for if the operation is not in accordance with the generally accepted doctrines upon that subject, a person will come very close to rendering himself liable for a trespass. A case in point occurs to me, in which a man brought suit for the removal of his testicles, the operation being undertaken for some frivolous reason, but with the full consent of the patient. The case was settled out of court by the payment of a round sum by the physician. If for no good reason the uterine appendages are removed, it is a question if the physician would not be liable under the law in most of our States.

Dr. H. McIntyre, of St. Louis, said: The necessity for proper surgical drill before attempting abdominal operations. Make plaintiff responsible by sufficient bond for indemnity for damage done the doctor before suit can be entered. The need of a general change of our laws in justice to the surgeon. Illustrative case where young man wished to be castrated and operation was declined, but circumcision was done with great benefit. Good results in Battey-Tait operations.

The following papers were read consecutively: *Medico Legal Relations of Abdominal Surgery*, by Albert Vanderveer, Albany, N. Y., read by title; *Medico-Legal Bearings of the Battey Operation*, by Robert Battey, Rome, Ga., read by title; *What is the Medico-Legal Status of the Abdominal Surgeon*, by William Porter, Buffalo, N. Y.; *Medico-Legal Aspects of Gunshot Wounds of the Abdomen*, by Nicholas Senn, Milwaukee, Wis., read by title; *The Responsibility in Cases of Intestinal Obstruction*, by B. T. Shimwell, Philadelphia, Pa.; *Some Special Reasons why the Laparotomists should Consider the Medico-Legal Aspects of Abdominal Surgery*, by Henry O. Marcy, Boston, Mass.; *Exploratory Laparotomy from a Medico-Legal Standpoint*, by William C. Wile, Danbury, Conn., read by title; *The Medico-Legal Responsibility in Abdominal Surgery*, by J. D. S. Davis, Birmingham, Ala., read by title; *The Medico-Legal Questions which arise from the Mistakes of Abdominal Tumors for Pregnancy*, by David W. Yandell, Louisville, Ky., read by title; *The Legal Responsibility in Surgery of the Abdomen*, by Thomas H. Manly, New York, N. Y.

These papers were discussed by Dr. Price, of Philadelphia. He believed all these cases should be operated on at the time and place and not left to the future.

Dr. Shimwell, of Philadelphia, differed from Dr. Manly in the safety of the operations of the abdomen. Dr. Marcy also differed, and urged that more care and special training are necessary in these cases. All the operations should be prompt and not put off.

Dr. Manly replied defending his position of advising great caution in the operations of the abdomen.

DOMESTIC CORRESPONDENCE.

To the Professions of Medicine and Pharmacy, and the Medical and Pharmaceutical Colleges of the United States and Canada.

At the last meeting of the *American Association for the Advancement of Science*, held at Toronto, Canada, September, 1889, the undersigned were appointed a committee to promote the use of the metric system of weights and measures among professional men, and especially to secure its more general adoption by the physicians and pharmacists, and the chemical and pharmaceutical manufacturers of our country.

The metric weights and measures were legalized in this country by Congress in 1866, and are now in actual use by most students of natural history, by some scientific periodicals, by the graduates of our schools of civil and mining engineering, and especially by all scientists and chemists throughout the world, without regard to their mother tongue. It is nevertheless greatly to be regretted, that a large majority of our physicians, pharmacists and druggists, still continue to ignore its merits or discountenance its adoption.

The merits of the metric system have been so thoroughly recognized that it is adopted by most civilized nations. Further argument should be unnecessary to secure its universal adoption in our hemisphere, where it is already in exclusive use by all the States of Southern and Central America.

It is a strange and irreconcilable fact, that the Governments of Great Britain and the United States, or the English speaking peoples, should stand quite alone in their stubborn and persistent adherence to the use of heterogenous standards of weights and measures, completely devoid of system in themselves, or of any practical and rational relationship to each other. And it is especially strange, in view of the practical utility of the metric system, that the professions of medicine and pharmacy in this country should in this respect at the present time, be behind the various arts of engineering, as must be conceded by those familiar with the facts.

This condition of things is not due to any inherent defects in the system itself, but to indolence and a want of practical acquaintance with the metric system, which largely amounts to positive ignorance, that is unjustifiable, since it hinders the proper assimilation of the great mass of scientific literature in which the system is exclusively used, tends to increase the risk of errors in our professional work, and imposes much unnecessary labor on the student.

The educated representatives of medicine and pharmacy in this country favor, and would gladly adopt the metric system, but find their efforts in this direction constantly hampered and nullified by the opposition of a large number of both professions who, through conservatism or lack of education, fail to unite in any concerted effort for its more general adoption and use.

It is unnecessary here to expatiate on the advantages of the metric system of weights and measures. The identity of the single factor with our system of numeration, the perfect correspondence between measures of weight and capacity, its approval by a large majority of the nations of the world, and especially its actual use by scientists and chemists without exception, render its ultimate adoption by all arts dependent on natural sciences, and especially by medicine and pharmacy, a matter of necessity and certainty. Its adoption is not to be viewed as an experiment, as would be such modifications of our present forms as have been proposed by some individual enthusiasts, and which have received but little consideration by any but their inventors.

The argument that our system of weights and measures is the same as that in use in Great Britian, with whom we have most intercourse, is without foundation. The system we use is well called the *American system*, for no other nation uses it. The *troy* pound has been abolished in Great Britain, and no longer appears in their text-books, and the fluid measures are different in the proportion of 4 to 5.

If identity is to be preserved between our measures and those of any other nation, some change must be made, and we believe there is substantial unanimity in a preference for the metric system as in place of our old system if any change is made.

It is wholly unnecessary to defer the adoption of this much needed reform until the prejudices, fallacious arguments, or educational deficiencies manifested by a large contingent of pharmacists and physicians shall have been overcome. Such a period must necessarily be remote, and indefinite, while the method herein proposed avoids any delay. The difficulty of securing any change on the part of men already in active business is well shown by the fact, that the simple innovation in the present U. S. Pharmacopœia of expressing quantities in *parts by weight*, demonstrates how large a number of pharmacists are incapable of comprehending so simple a relationship when applied to the complicated empirical and antiquated systems of weights and measures in present use.

One of the principal reasons why the metric system has not yet been adopted in this country by professional men, is the indifference shown by our professional schools. Every student of medicine and pharmacy is practically obliged to learn a system of weights and measures new to him when he begins professional study. He may

have learned the apothecary tables in his school days, but he has not used them, and as elements of thought the grain and drachm are entirely new to him. If the gram and cubic centimeter are substituted for them, no additional labor is entailed upon the student. It must not be supposed at the present time, that professors who are rarely competent, are ignorant of this system, and hence this change would not entail any additional labor on the professors. In fact it would diminish the labor, of both professors and students, for in medical schools at the present time, instruction is given in both systems, and it would simply make the methods of instruction uniform in the chairs of materia medica, pharmacy, and chemistry, where now is a confusion.

The pharmacopœia does not now recognize the troy system, and if the doses were taught in metric terms only, the old system would die out with the passing off of the present generation of practitioners. No inconvenience would be caused to any one, those who are to old to learn, could go on using their present mode, and the new graduates would use that which they are taught.

It should be particularly remembered that we are not trying to introduce a new system but to drop an old one, which is as irrational and unscientific as any other relic of barbarism. *It is especially opportune at this time when a new revision of the Pharmacopœia of the United States is pending, that the committee of revision, as well as the pharmacists, druggists, and physicians of this country, should have their attention particularly directed to this important subject.* For the use of these professions, six lines contain all that is necessary, as follows:

1000 milligrams make one gram, or liter.
1000 grams or cubic centimeter make one kilo.
1000 kilos. make one ton.
65 milligrams make one grain.
15½ grains make one gram.
31 grams make one ounce troy.

In writing prescriptions, a vertical line should be drawn between grams and milligrams, all figures on the left read grams, all on the right to three figures, respectively deci-, centi-, and milligrams.

Chemists think in milligrams and grams only, and pharmacists and physicians may do likewise, reducing our system to two denominations only. In the arts the milligram is not divided.

As the metric system is legal throughout the United States any physician is entitled to present a metric prescription to the druggist. All boards of examiners in medicine and pharmacy, whether State or collegiate, are justified by law to exact, and *should demand from every candidate for graduation, or for license a knowledge of the metric system.*

We also earnestly recommend, that schools of medicine cease to give instruction in the apothecary system of weights and measures for which there is no longer any reason, and that in the schools of pharmacy the merits of the metric system should be presented with the prominence that its utility, and the near prospect of its adoption justify, in the best way to secure its immediate use as the exclusive system of weighing and measuring in medicine and pharmacy, and in the manufacturing arts correlative with them. And for the further promotion of this object, we recommend that an addition be made to the pharmacy laws now in force in most of our States, prescribing that all persons receiving a license to sell drugs and dispense medicines shall be required to provide themselves with a set of metric weights.

Prof. Wm. H. Seaman, Washington, D. C.
Dr. Fred. Hoffmann, New York.
Prof. Robt. B. Warder, Washington, D. C.
Committee A. A. A. Sc.

PROF. T. C. MENDENHALL, Pres. A. A. A. Sc.
April 15, 1890.

The Census of Hallucinations.

To the Editor:—May I ask for the publicity of your pages to aid me in procuring coöperation in a scientific investigation for which I am responsible? I refer to the *Census of Hallucinations*, which was begun several years ago by the Society for Psychical Research, and of which the International Congress of Experimental Psychology at Paris, last summer, assumed the future responsibility, naming a committee in each country to carry on the work.

The object of the inquiry is twofold: 1, to get a mass of facts about hallucinations which may serve as a basis for a scientific study of these phenomena; and 2, to ascertain approximately the *proportion of persons* who have had such experiences. Until the average frequency of hallucinations in the community is known, it can never be decided whether the so-called "veridical" hallucinations (visions or other "warnings" of the death, etc., of people at a distance) which are so frequently reported, are accidental coincidences, or something more.

Some 8,000 or more persons in England, France and the United States have already returned answers to the question which heads the census sheet, and which runs as follows:

"*Have you ever, when completely awake, had a vivid impression of seeing or being touched by a living being or inanimate object, or of hearing a voice; which impression, so far as you could discover, was not due to any external physical cause?*"

The "Congress" hopes that at its next meeting, in England in 1892, as many as 50,000 answers may have been collected. It is obvious that for the purely statistical inquiry, *the answer "No" is as important as the answer "Yes."*

I have been appointed to superintend the Census in America, and I most earnestly bespeak the coöperation of any among your readers who may be actively interested in the subject. It is clear that very many volunteer canvassers will be needed to secure success. Each census blank contains instructions to the collector, and places for twenty-five names; and special blanks for the "Yes" cases are furnished in addition. I shall be most happy to furnish these blanks to any one who will be good enough to make application for them to Yours truly, PROFESSOR WM. JAMES.

Harvard University, Cambridge, Mass.

BOOK REVIEWS.

TEXT-BOOK OF MEDICAL CHEMISTRY. For Medical and Pharmaceutical Students and Practitioners. By ELIAS H. BARTLEY, B.S., M.D., Prof. of Chem. and Tox., Lecturer on Diseases of Children in Long Island College Hospital; late Chief Chemist to the Dep't of Health, Brooklyn, etc. Second edition, revised and enlarged. Pp. xi, 423. Philadelphia: P. Blakiston, Son & Co. 1890.

This is a compact and useful volume. Well adapted for use as a text-book for all classes of students. The present edition has been brought up to date, and leaves but little to be desired within the scope outlined by the author; it is, however, a work on descriptive and not analytical chemistry.

A TREATISE ON MATERIA MEDICA, PHARMACOLOGY AND THERAPEUTICS. By JOHN V. SHOEMAKER, A.M., M.D., Prof. of Mat. Med., Phar. and Ther. in the Medico-Chirurgical College of Philadelphia, and member Am. Med. Ass'n, and JOHN AULDE, M.D., Dem. of Clin. Med. and of Physical Diagnosis in the Medico-Chirurgical College of Philadelphia, and member of Am. Med. Ass'n. In two volumes. Vol. I, pp. xii-353. Net price, cloth, $2.50, sheep, $3.25. Philadelphia and London: F. A. Davis. 1889.

This new work presents some decidedly novel features, and in so far as one may judge from an inspection of the first volume, is destined to become a popular treatise. About one-third of volume I is devoted to general considerations respecting materia medica, pharmacy, pharmacology and therapeutics. The chapters on pharmacy and pharmacology are much more complete than those usually found in works of this character, and indeed we observe a growing tendency to instruct the profession much more fully on this subject than was formerly the case. In connection with the subject of general therapeutics, a convenient dietary for the sick is given.

The remaining two-thirds of the volume is occupied with a discussion of remedies and remedial agents used in the treatment of disease, but not properly classed with drugs. These are subjects which very properly occupy a place in works on materia medica, but unfortunately they are usually accorded a very narrow limit. In the present work they form a very important part of the whole, and are considered under the following heads: Electro-therapeutics, oxygen, hydro-therapeutics, masso-therapeutics, heat and cold, mineral waters, metallo-therapy, transfusion, hypnotism, earth dressing, Baunscheidtismus (a method of counter-irritation), climatology, light, music, blood-letting, and suspension. Most of these subjects are very fully treated, the chapters on electro-therapeutics and oxygen being particularly valuable.

MISCELLANY.

Official List of Changes in the Stations and Duties of Officers Serving in the Medical Department, U. S. Army, from May 17, 1890, to May 23, 1890.

First Lieut. Leonard Wood, Asst. Surgeon, having completed at Newport the duties assigned him in S. O. 29, April 30, Div. of the Pacific, will return to his station in that Division. Leave of absence for one month is granted First Lieut. Leonard Wood, Asst. Surgeon U. S. A. Pars. 19 and 20, S. O. 115, A. G. O., May 16, 1890.

Major Leonard Y. Loring, now on sick leave of absence until further orders, is relieved from duty in the Dept. of Arizona. Par 14, S. O. 115, A. G. O., May 16, 1890.

By direction of the Secretary of War, the following named officers of the Medical Dept. will proceed to Berlin, Germany, as delegates to the International Medical Congress which is to meet in that city in August next: Lieut.-Col. Charles H. Alden, Surgeon; Major John S. Billings, Surgeon. After the adjournment of the Congress the officers named will return to the United States and rejoin their proper stations.

By direction of the Secretary of War, Major John S. Billings, Surgeon, will while abroad under his orders to attend the International Medical Congress at Berlin, Germany, before returning to the United States, visit, on official business, such points in Great Britain, France, Italy, Germany, Belgium, Holland, and elsewhere, as may be deemed necessary by the Surgeon-General of the Army, and under such special instructions as he may receive from the Surgeon-General. Pars. 11 and 12, S. O. 116, A. G. O., Hdqrs. of the Army, Washington, May 17, 1890.

First Lieut. Theodore F. DeWitt, Asst. Surgeon, is relieved from duty at Willett's Point, New York, and will report in person to the commanding officer, Ft. Ringgold, Tex., for duty at that station, relieving Capt. W. Fitzhugh Carter, Asst. Surgeon. Capt. Carter, upon being thus relieved, will proceed to West Point, N. Y., and report in person to the Superintendent U. S. Military Academy for duty at that station. Par. 2, S. O. 119, A. G. O., May 21, 1890.

Capt. Robert B. Benham, Asst. Surgeon, is relieved from further duty at Madison Bks., New York, and will report in person to the commanding officer, Ft. Wadsworth, New York, for duty at that station, relieving Capt. Charles K. Winne, Surgeon. Capt. Winne, upon being thus relieved, will proceed to Ft. Snelling, Minn., and report in person to the commanding officer thereof, for duty at that post. Par. 2, S. O. 119, A. G. O., May 21, 1890.